

New Series.

Vol. XXVI.—No. 6.

THE

ECLECTIC

MAGAZINE

OF FOREIGN LITERATURE

DECEMBER.



W. H. BIDWELL
EDITOR

THE ATHENEUM.

NEW YORK:

E. R. PELTON, PUBLISHER, 23 BOND STREET.

AMERICAN NEWS CO., AND NEW YORK NEWS CO., *General Agents.*

Terms: Single Numbers, 45 Cents. Yearly Subscription, \$5.

CONTENTS OF THE DECEMBER NUMBER.

STEEL ENGRAVING—PORTRAIT OF M. DE LESSEPS.

I. A MODERN 'SYMPOSIUM.' Lord SELBORNE, Rev. Canon BARRY, Mr. W. R. GREG, Rev. BALDWIN BROWN, Dr. W. G. WARD, Mr. FREDERIC HARRISON. Subject (concluded): 'THE SOUL AND FUTURE LIFE'.....	<i>The Nineteenth Century</i> ..	641
II. THE MOONS OF MARS.....	<i>Cornhill Magazine</i>	667
III. THE KHEDIVÉ'S EGYPT.....	<i>Blackwood's Magazine</i>	677
IV. HOURS IN A LIBRARY.—MASSINGER. By LESLIE STEPHEN.....	<i>Cornhill Magazine</i>	688
V. LOCH CARBON, WESTERN HIGHLANDS.....	<i>Cornhill Magazine</i>	702
VI. ROUND THE WORLD IN A YACHT. Part III. By THOMAS BRASSET, M.P.....	<i>The Nineteenth Century</i> ..	702
VII. METEORITES AND THE ORIGIN OF LIFE. By WALTER FLIGHT, F.G.S.....	<i>Popular Science Review</i> ...	711
VIII. ON THE COMPARATIVE STUPIDITY OF POLITICIANS.....	<i>Fraser's Magazine</i>	718
IX. LA BELLA MORTE. By CHARLES MACKAY.....	<i>Belgravia Magazine</i>	722
X. YOUNG MUSGRAVE. By Mrs. OLIPHANT. Chapters XXVIII. to XXX.....		723
XI. GERMAN SOCIETY FORTY YEARS SINCE. By Lady DUFF GORDON.....	<i>Macmillan's Magazine</i> ..	740
XII. EXPERIENCES OF AN INDIAN FAMINE. By an INDIAN OFFICIAL.....	<i>Cornhill Magazine</i>	746
XIII. THE STORY OF A PATRON SAINT (ST. MARK OF VENICE).....	<i>Belgravia Magazine</i>	754
XIV. Prof. TYNDALL ON PHYSICAL AND MORAL NECESSITY.....	<i>The Spectator</i>	757
XV. M. FERDINAND DE LESSEPS. By the Editor.....		761
XVI. LITERARY NOTICES.....		762
Cook's Lectures on Biology—History of the Ottoman Turks—Howells' Choice Autobiographies—The Physiology of Mind—History of French Literature.		
XVII. FOREIGN LITERARY NOTES.....		765
XVIII. SCIENCE AND ART.....		766
Spontaneous Generation—The Society of Americanists—Seamen's Remedy against Seasickness—Action of Tobacco on the System—More Perfect Galvanic Batteries—Sun-spots and Storms—Polarisation of Diffracted Light—Disinfectant for the Sick Room.		
XIX. VARIETIES.....		767
A Special Correspondent's Outfit—Dr. Johnson as a Man—Villanelle		

PUBLISHER'S NOTE.

This number of the *ECLECTIC* closes the twenty-sixth volume of the new series.

According to the custom to which we have adhered for many years, we shall continue to send the *ECLECTIC* to all subscribers who do not notify us of their desire to have it discontinued.


We shall be glad if our subscribers will renew their subscriptions promptly, and we can assure them that the volumes for the new year will fully equal, if not excel, those of the past thirty-three years. We call attention to our new prospectus on the outside cover of this number of the *ECLECTIC*, and especially to our

SPECIAL OFFER TO SUBSCRIBERS.

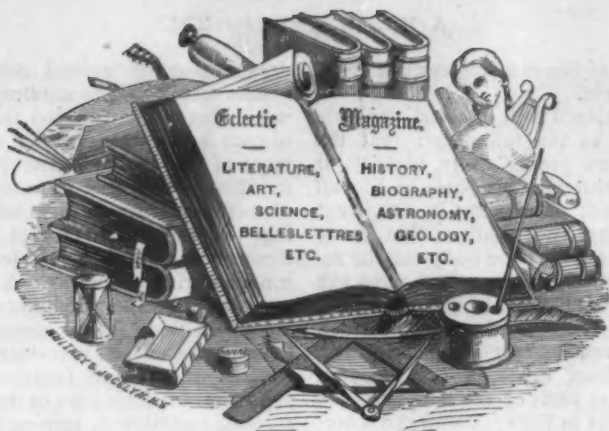
We hope our subscribers will avail themselves of the opportunity to obtain a fine engraving at a very small cost—the orders will be filled as they are received, and the first edition from the plate is now ready.

The *ECLECTIC* and any \$4 publication will be sent to one address for \$8, and a proportionate reduction will be made when clubbed with any other publication.

 The postage on the *ECLECTIC* is prepaid by the Publisher. 

 Green cloth covers for binding two vols. per year, will be furnished at 50 cts. each, or \$1 per year, or sent by mail on receipt of price; and the numbers will be exchanged for bound volumes, in library style, for \$2.50 per year, or in green cloth for \$1.50 per year.

 Mr. J. Wallace Atger is our general Business Agent.



Eclectic Magazine

OF

FOREIGN LITERATURE, SCIENCE, AND ART.

New Series,
Vol. XXVI., No. 6.

DECEMBER, 1877.

Old Series Com-
plete in 63 vols.

A MODERN 'SYMPOSIUM.' THE SOUL AND FUTURE LIFE.

LORD SELBORNE.

I am too well satisfied with Lord Blachford's paper, and with much that is in the other papers of the September number, to think that I can add anything of importance to them. The little I would say has reference to our actual knowledge of the soul during this life; meaning by the soul what Lord Blachford means, viz., the conscious being, which each man calls 'himself.'

It appears to me, that what we know and can observe tends to confirm the testimony of our consciousness to the reality of the distinction between the body and the soul. From the necessity of the case, we cannot observe any manifestations of the soul, except during the time of its association with the body. This limit of our experience applies, not to the 'ego,' of which alone each man has any direct knowledge, but to the perceptible indications of consciousness in others. It is impossible, in the nature of

things, that any man can ever have had experience of the total cessation of his own consciousness; and the idea of such a cessation is much less natural, and much more difficult to realise, than that of its continuance. We observe the phenomena of death in others, and infer, by irresistible induction, that the same thing will also happen to ourselves. But these phenomena carry us only to the dissociation of the 'ego' from the body, not to its extinction.

Nothing else can be credible, if our consciousness is not; and I have said that this bears testimony to the reality of the distinction between soul and body. Each man is conscious of using his own body as an instrument, in the same sense in which he would use any other machine. He passes a different moral judgment on the mechanical and involuntary actions of his body, from that which he feels to be due to its actions resulting from his own free will. The unity and identity of the 'ego' from the beginning

to the end of life, is of the essence of his consciousness.

In accordance with this testimony are such facts as the following: that the body has no proper unity, identity, or continuity through the whole of life, all its constituent parts being in a constant state of flux and change; that many parts and organs of the body may be removed, with no greater effect upon the 'ego' than when we take off any article of clothing; and that those organs which cannot be removed or stopped in their action without death, are distributed over different parts of the body, and are homogeneous in their material and structure with others which we can lose without the sense that any change has passed over our proper selves. If, on the one hand, a diseased state of some bodily organs interrupts the reasonable manifestations of the soul through the body, the cases are, on the other, not rare, in which the whole body decays, and falls into extreme age, weakness, and even decrepitude, while vigor, freshness, and youthfulness are still characteristics of the mind.

The attempt, in Butler's work, to reason from the indivisibility and indestructibility of the soul, as ascertained facts, is less satisfactory than most of that great writer's arguments, which are, generally, rather intended to be destructive of objections, than demonstrative of positive truths. But the modern scientific doctrine, that all matter, and all force, are indestructible, is not without interest in relation to that argument. There must at least be a natural presumption from that doctrine, that, if the soul during life has a real existence distinct from the body, it is not annihilated by death. If, indeed, it were a mere 'force' (such as heat, light, &c., are supposed by modern philosophers to be, though men who are not philosophers may be excused, if they find some difficulty in understanding exactly what is meant by the term, when so used), it would be consistent with that doctrine, that the soul might be transmuted, after death, into some other form of force. But the idea of 'force,' in this sense (whatever may be its exact meaning), seems wholly inapplicable to the conscious being, which a man calls 'himself.'

The resemblances in the nature and

organisation of animal and vegetable bodies seem to me to confirm, instead of weakening, the impression, that the body of man is a machine under the government of his soul, and quite distinct from it. Plants manifest no consciousness; all our knowledge of them tends irresistibly to the conclusion, that there is in them no intelligent, much less any reasonable, principle of life. Yet they are machines very like the human body, not indeed in their formal development or their exact chemical processes, but in the general scheme and functions of their organism—in their laws of nutrition, digestion, assimilation, respiration, and especially reproduction. They are bodies without souls, living a physical life, and subject to a physical death. The inferior animals have bodies still more like our own; indeed, in their higher orders, resembling them very closely indeed; and they have also a principle of life quite different from that of plants, with various degrees of consciousness, intelligence, and volition. Even in their principle of life, arguments founded on observation and comparison (though not on individual consciousness), more or less similar to those which apply to man, tend to show that there is something distinct from, and more than, the body. But, of all these inferior animals, the intelligence differs from that of man, not in degree only, but in kind. Nature is their simple, uniform, and sufficient law; their very arts (which are often wonderful) come to them by nature, except when they are trained by man; there is in them no sign of discourse of reason, of morality, or of the knowledge of good and evil. The very similarity of their bodily structure to that of man tends, when these differences are noted, to add weight to the other natural evidence of the distinctness of man's soul from his body.

The immortality of the soul seems to me to be one of those truths, for the belief in which, when authoritatively declared, man is prepared by the very constitution of his nature.

CANON BARRY.

Any one who from the ancient positions of Christianity looks on the controversy between Mr. Harrison and Professor Huxley on 'The Soul and Future

Life' (to which I propose mainly to confine myself) will be tempted with Faulconbridge to observe, not without a touch of grim satisfaction, how, 'from North to South, Austria and France shoot in each other's mouth.' The fight is fierce enough to make him ask, *Tantæne animis sapientibus iræ?* But he will see that each is far more effective in battering the lines of the enemy than in strengthening his own. Nor will he be greatly concerned if both from time to time lodge a shot or two in the battlements on which he stands, with some beating of that 'drum scientific,' which seems to me to be in these days always as resonant, sometimes with as much result of merely empty sound, as 'the drum ecclesiastic,' against which Professor Huxley is so fond of warning us. Those whom Mr. Harrison calls 'theologians,' and whom Professor Huxley less appropriately terms 'priests' (for of priesthood there is here no question), may indeed think that, if the formidable character of an opponent's position is to be measured by the scorn and fury with which it is assailed, their ground must be strong indeed; and they will possibly remember an old description of a basis less artificial than 'pulpit stairs,' from which men may look without much alarm, while 'the floods come and the winds blow.' Gaining from this conviction courage to look more closely, they will perceive, as I have said, that each of the combatants is far stronger on the destructive than on the constructive side.

Mr. Harrison's earnest and eloquent plea against the materialism which virtually, if not theoretically, makes all that we call spirit a mere function of material organisation (like the *ἀρροία* of the *Phædo*), and against the exclusive 'scientism' which, because it cannot find certain entities along its line of investigation, asserts loudly that they are either non-existent or 'unknowable,' is strong and (pace Professor Huxley) needful; not, indeed, against him (for he knows better than to despise the metaphysics in which he is so great an adept), but against many adherents, prominent rather than eminent, of the school in which he is a master. Nor is its force destroyed by exposing, however keenly and sarcastically, some inconsistencies of argument, not inaptly corresponding (as it seems to

me) with similar inconsistencies in the popular exposition of the views which it attacks. If Professor Huxley is right (as surely he is) in pleading for perfect freedom and boldness in the investigation of the phenomena of humanity from the physical side, the counter plea is equally irresistible for the value of an independent philosophy of mind, starting from the metaphysical pole of thought, and reasoning positively on the phenomena, which, though they may have many connections with physical laws, are utterly inexplicable by them. We might, indeed, demur to his inference that the discovery of 'antecedence in the molecular fact' necessarily leads to a 'physical theory of moral phenomena,' and *vice versa*, as savoring a little of the *Post hoc, ergo propter hoc*. Inseparable connection it would imply; but the ultimate causation might lie in something far deeper, underlying both 'the molecular' and 'the spiritual fact.' But still, to establish such antecedence would be an important scientific step, and the attempt might be made from either side.

On the other hand, Professor Huxley's trenchant attack on the unreality of the Positivist assumption of a right to take names which in the old religion at least mean something firm and solid, and to sublime them into the cloudy forms of transcendental theory, and on the arbitrary application of the word 'selfishness,' with all its degrading associations, to the consciousness of personality here and the hope of a nobler personality in the future, leaves nothing to be desired. I fear that his friends the priests would be accused of the crowning sin of 'ecclesiasticism' (whatever that may be) if they used denunciations half so sharp. Except with a few sarcasms which he cannot resist the temptation of flinging at them by the way, they will have nothing with which to quarrel; and possibly they may even learn from him to consider these as claps of 'cheap thunder,' from the 'pulpit,' in that old sense of the word in which it designates the professorial chair.

The whole of Mr. Harrison's two papers may be resolved into an attack on the true individuality of man, first on the speculative, then on the moral side; from the one point of view denouncing the belief in it as a delusion, from the

other branding the desire of it as a moral degradation. The connection of the two arguments is instructive and philosophical. For no argument merely speculative, ignoring all moral considerations, will really be listened to. His view of the soul as 'a consensus of human faculties' reminds us curiously of the Buddhist 'groups'; his description of 'a perpetuity of sensation as the true Hell' breathes the very spirit of the longing for *Nirvana*. Both he and his Asiatic predecessors are certainly right in considering the 'delusion of individual existence' as the chief delusion to be got rid of on the way to a perfect Agnosticism, in respect of all that is not merely phenomenal. It is true that he protests in terms against a naked materialism, ignoring all spiritual phenomena as having a distinctive character of their own; but yet, when he tells us that 'to talk about a bodiless being thinking and loving is simply to talk of the thoughts and feelings of Nothing,' he certainly appears to assume substantially the position of the materialism he denounces, which (as has been already said) holds these spiritual energies to be merely results of the bodily organisation, as the excitation of an electric current is the result of the juxtaposition of certain material substances. If a bodiless being is Nothing, there can be no such thing as an intrinsic or independent spiritual life; and it is difficult for ordinary minds to attach any distinct meaning to the declaration that the soul is 'a conscious unity of being,' if that being depends on an organisation which is unquestionably discernible, and of which (as Butler remarks) large parts may be lost without affecting this consciousness of personality.

Now this is, after all, the only point worth fighting about. Mr. Hutton has already said with perfect truth that by 'the Soul' we mean that 'which lies at the bottom of the sense of personal identity—the thread of the continuity running through all our chequered life,' and which remains unbroken amidst the constant flux of change both in our material body, and in the circumstances of our material life. This belief is wholly independent of any 'metaphysical hypothesis' of modern 'orthodoxy,' whether it is, or is not, rightly described as a 'juggle of ideas,' and of any examination of

the question (on which Lord Blachford has touched) whether, if it seem such to 'those trained in positive habits of thought,' the fault lies in it or in them. I may remark in passing, that in this broad and simple sense it certainly runs through the whole Bible, and has much that is 'akin to it in the Old Testament.' For even in the darkest and most shadowy ideas of the *Sheol* of the other world, the belief in a true personal identity is taken absolutely for granted; and it is not a little curious to notice how in the Book of Job the substitution for it of 'an immortality in the race' (although there not in the whole of humanity, but simply in the tribe or family) is offered, and rejected as utterly insufficient to satisfy either the speculation of the intellect or the moral demands of the conscience.* Now it is not worth while to protest against the caricature of this belief, as a belief in 'man plus a heterogeneous entity' called the soul, which can be only intended as a sarcasm. But we cannot acquiesce in any statement, which represents the belief in this immaterial and indivisible personality as resting simply on the notion that it is needed to explain the acts of the human organism. For, as a matter of fact, those who believe in it conceive it to be declared by a direct consciousness, the most simple and ultimate of all acts of consciousness. They hold this consciousness of a personal identity and individuality, unchanging amidst material change, to be embodied in all the language and literature of man; and they point to the inconsistencies in the very words of those who argue against it, as proofs that man cannot divest himself of it. No doubt they believe that so the acts of the organism are best explained, but it is not on the necessity of such explanation that they base their belief: and this fact separates altogether their belief in the human soul, as an immaterial entity, from those conceptions of a soul, in animal, vegetable, even inorganic substances, with which Mr. Harrison insists on confounding it. Of the true character of animal nature we know nothing (although we may conjecture much), just because we have not in regard to it the direct consciousness, which we have in

* See Job xiv. 21, 22.

regard of our own nature. Accordingly we need not trouble our argument for a soul in man with any speculation as to a true soul in the brute creatures.

In what relation this personality stands to the particles which at any moment compose the body, and which are certainly in a continual state of flux, or to the law of structure which in living beings, by some power to us unknown, assimilates these particles, is a totally different question. I fear that Mr. Harrison will be displeased with me if I call it 'a mystery.' But, whatever future advances of science may do for us in the matter—and I hope they may do much—I am afraid I must still say that this relation is a mystery, which has been at different times imperfectly represented, both by formal theories and by metaphors, all of which by the very nature of language are connected with original physical conceptions. Let it be granted freely that the progress of modern physiological science has rendered obsolete the old idea that the various organs of the body stand to the true personal being in a purely instrumental relation, such as (for example) is described by Butler in his *Analogy*, in the celebrated chapter on the Future Life. The power of physical influences acting upon the body to affect the energies of thought and will is unquestionable. The belief that the action of all these energies is associated with molecular change is, to say the least, highly probable. And I may remark that Christianity has no quarrel with these discoveries of modern science; for its doctrine is that for the perfection of man's being a bodily organisation is necessary, and that the 'intermediate state' is a state of suspense and imperfection, out of which, at the word of the Creator, the indestructible personality of man shall rise, to assimilate to itself a glorified body. The doctrine of the Resurrection of the Body boldly faces the perplexity as to the connection of a body with personality, which so greatly troubled ancient speculation on the immortality of the soul. In respect of the intermediate 'state,' it only extends (I grant immeasurably) the experience of those suspensions of the will and the full consciousness of personality, which we have in life, in sleep, swoon, stupor, dependent on normal and abnor-

mal conditions of the bodily organisation; and in respect of the Resurrection, it similarly extends the action of that mysterious creative will, which moulds the human body of the present life slowly and gradually out of the mere germ, and forms, with marvellous rapidity and exuberance of prolific power, lower organisms of high perfection and beauty.

But while modern science teaches us to recognise the influence of the bodily organisation on mental energy, it has, with at least equal clearness, brought out in compensation the distinct power of that mental energy, acting by a process wholly different from the chain of physical causation, to alter functionally, and even organically, the bodily frame itself. The Platonic Socrates (it will be remembered) dwells on the power of the spirit to control bodily appetite and even passion (τὸ θυμοειδές), as also on its having the power to assume qualities, as a proof that it is not a mere ἀρμυρία. Surely modern science has greatly strengthened the former part of his argument, by these discoveries of the power of mind over even the material of the body. This is strikingly illustrated (for example) to the physician, both by the morbid phenomena of what is called generally 'hysteria,' in which the belief in the existence of physical disease actually produces the most remarkable physical effects on the body; and also by the more natural action of the mind on the body, when in sickness a resolution to get well masters the force of disease, or a desire to die slowly fulfils itself. Perhaps even more extraordinary is the fact (I believe sufficiently ascertained) that during pregnancy the presentation of ideas to the mind of the mother actually affects the physical organisation of the offspring. Hence I cannot but think that, at least as distinctly as ever, our fuller experience discloses to us two different processes of causation acting upon our complex humanity—the one wholly physical, acting sometimes by the coarser mechanical agencies, sometimes by the subtler physiological agencies, and in both cases connecting man through the body with the great laws ruling the physical universe—the other wholly metaphysical, acting by the simple presentation of ideas to the mind (which may, indeed, be so purely subjective that they

correspond to no objective reality whatever), and, through them, secondarily acting upon the body, producing no doubt the molecular changes in the brain and the affections of the nervous tissue, which accompany and exhibit mental emotion. In the normal condition of the earthly life, these two powers act and react upon each other, neither being absolutely independent of the other. In the perfect state of the Hereafter we believe that it shall be so still. But we do know of cases in which the metaphysical power is apparently dormant or destroyed, in which accordingly all emotions can be produced automatically by physical processes only, as happens occasionally in dreams (whether of the day or night), and in morbid conditions, as of idiocy, which may themselves be produced either by physical injury or by mental shock. I cannot myself see any difficulty in conceiving that the metaphysical power might act, though no doubt in a way of which we have no present experience, and (according to the Christian doctrine) in a condition of some imperfection, when the bodily organisation is either suspended or removed. For to me it seems clear that there is something existent, which is neither material nor even dependent on material organisation. Whether it be stigmatised as a 'heterogeneous entity,' or graciously designated by the 'good old word soul,' is a matter of great indifference. There it is; and, if it is, I cannot see why it is inconceivable that it should survive all material change. For here, as in other cases, there seems to be a frequent confusion between conceiving that a thing may be, and conceiving how it may be. Of course we cannot figure to ourselves the method of the action of a spiritual energy apart from a bodily organisation; in the attempt to do so the mind glides into quasi-corporeal conceptions and expressions, which are a fair mark for satire. But that there may be such action is to me far less inconceivable, than that the mere fact of the dissolution of what is purely physical should draw with it the destruction of a soul, that can think, love, and pray.

I do not think it necessary to dwell at any length on the second of Mr. Harrison's propositions, denouncing the de-

sire of personal and individual existence as 'selfishness,' with a vigor quite worthy of his royal Prussian model. But history, after all, has recognised that the poor grenadiers had something to say for themselves. Mr. Hutton has already suggested that, if Mr. Harrison had studied the Christian conception of the future life, he could not have written some of his most startling passages, and has protested against the misapplication of the word 'selfishness,' which in this, as in other controversies, quietly begs the question proposed for discussion. The fact is that this theory of 'Altruism,' so eloquently set forth by Mr. Harrison and others of his school, simply contradicts human nature, not in its weaknesses or sins, but in its essential characteristics. It is certainly not the weakest or ignoblest of human souls, who have felt, at the times of deepest thought and feeling, conscious of but two existences—their own, and the Supreme Existence, whether they call it Nature, Law, or God. Surely this Humanity is a very unworthy deity, at once a vague and shadowy abstraction, and, so far as it can be distinctly conceived, like some many-headed idol, magnifying the evil and hideousness, as well as the good and beauty, of the individual nature. But if it were not so, still that individuality, as well as unity, is the law of human nature, is singularly indicated by the very nature of our mental operations. In the study and perception of truth, each man, though he may be guided to it by others, stands absolutely alone; in love, on the other hand, he loses all but the sense of unity; while the conscience holds the balance, recognising at once individuality and unity. Indeed, the sacredness of individuality is so guarded by the darkness which hides each soul from all perfect knowledge of man, so deeply impressed on the mind by the consciousness of independent thought and will, and on the soul by the sense of incommunicable responsibility, that it cannot merge itself in the life of the race. Self-sacrifice, or unselfishness, is the conscious sacrifice, not of our own individuality, but of that which seems to minister to it, for the sake of others. The law of human nature, moreover, is such that the very attempt at such sacrifice inevitably strengthens the spiritual individuality in

all that makes it worth having. To talk of 'a perpetuity of sensation as a true Hell' in a being supposed capable of indefinite growth in wisdom, righteousness, and love, is surely to use words which have no intelligible meaning.

No doubt, if we are to take as our guiding principle either Altruism or what is rightly designated 'selfishness,' we must infinitely prefer the former. But where is the necessity? No doubt the task of harmonising the two is difficult. But all things worth doing are difficult; and it might be worth while to consider whether there is not something in the old belief, which finds the key to this difficult problem in the consciousness of the relation to One Supreme Being, and, recognising both the love of man and the love of self, bids them both agree in conscious subordination to a higher love of God. What makes our life here will, we believe, make it up hereafter, only in a purer and nobler form. On earth we live at once in our own individuality and in the life of others. Our heaven is not the extinction of either element of that life—either of individuality, as Mr. Harrison would have it, or of the life in others, as in that idea of a selfish immortality which he has, I think, set up in order to denounce it—but the continued harmony of both under an infinitely increased power of that supreme principle.

MR. W. R. GREG.

It would seem impossible for Mr. Harrison to write anything that is not stamped with a vigor and racy eloquence peculiarly his own; and the paper which has opened the present discussion is probably far the finest he has given to the world. There is a lofty tone in its imaginative passages which strikes us as unique among Negationists, and a vein of what is almost tenderness pervading them, which was not observed in his previous writings. The two combined render the second portion one of the most touching and impressive speculations we have read. Unfortunately, however, Mr. Harrison's innate energy is apt to boil over into a vehemence approaching the intemperate; and the antagonistic atmosphere is so native to his spirit that he can scarcely enter the lists of controversy without an irresistible

tendency to become aggressive and unjust; and he is too inclined to forget the first duty of the chivalric militant logician, namely, to select the adversary you assail from the nobler and not the lower form and rank of the doctrine in dispute. The inconsistencies and weaknesses into which this neglect has betrayed him in the instance before us have, however, been so severely dealt with by Mr. Hutton and Professor Huxley, that I wish rather to direct attention to two or three points of his argument that might otherwise be in danger of escaping the appreciation and gratitude they may fairly claim.

We owe him something, it appears to me, for having inaugurated a discussion which has stirred so many minds to give us on such a question so much interesting and profound, and more especially so much suggestive, thought. We owe him much, too, because, in dealing with a thesis which it is specially the temptation and the practice to handle as a theme for declamation, he has so written as to force his antagonists to treat it argumentatively and searchingly as well. Some gratitude, moreover, is due to the man who had the moral courage boldly to avow his adhesion to the negative view, when that view is not only in the highest degree unpopular, but is regarded for the most part as condemnable into the bargain, and when, besides, it can scarcely fail to be painful to every man of vivid imagination and of strong affections. It is to his credit, also, I venture to think, that, holding this view, he has put it forward, not as an opinion or speculation, but as a settled and deliberate conviction, maintainable by distinct and reputable reasonings, and to be controverted only by pleas analogous in character. For if there be a topic within the wide range of human questioning in reference to which tampering with mental integrity might seem at first sight pardonable, it is that of a future and continued existence. If belief be ever permissible—perhaps I ought to say, if belief be ever possible—on the ground that 'there is peace and joy in believing,' it is here, where the issues are so vast, where the conception in its highest form is so ennobling, where the practical influences of the Creed are, in appearance at least, so beneficent. But

faith thus arrived at has ever clinging to it the curse belonging to all illegitimate possessions. It is precarious, because the flaw in its title-deeds, barely suspected perhaps and never acknowledged, may any moment be discovered; misgivings crop up most surely in those hard and gloomy crises of our lives when unflinching confidence is most essential to our peace; and the fairy fabric, built up not on grounded conviction but on craving need, crumbles into dust, and leaves the spirit with no solid sustenance to rest upon.

Unconsciously and by implication Mr. Harrison bears a testimony he little intended, not indeed to the future existence he denies, but to the irresistible longing and necessity for the very belief he labors to destroy. Perhaps no writer has more undesignedly betrayed his conviction that men will not and cannot be expected to surrender their faith and hope without at least something like a compensation; certainly no one has ever toiled with more noble rhetoric to gild and illuminate the substitute with which he would fain persuade us to rest satisfied. The nearly universal craving for posthumous existence and enduring consciousness, which he depreciates with so harsh a scorn, and which he will not accept as offering even the shadow or *simulacrum* of an argument for the Creed, he yet respects enough to recognise that it has its foundation deep in the framework of our being, that it cannot be silenced and may not be ignored. Having no precious metal to pay it with, he issues paper money instead, skilfully engraved and gorgeously gilded to look as like the real coin as may be. It is in vain to deny that there is something touching and elevating in the glowing eloquence with which he paints the picture of lives devoted to efforts in the service of the race, spent in laboring, each of us in his own sphere, to bring about the grand ideal he fancies for humanity, and drawing strength and reward for long years of toil in the anticipation of what man will be when those noble dreams shall have been realised at last—even though we shall never see what we have wrought so hard to win. It is vain to deny, moreover, that these dreams appear more solid and less wild or vague when we remember how close an analogy

we may detect in the labors of thousands around us who spend their whole career on earth in building up, by sacrifice and painful struggles, wealth, station, fame, and character for their children, whose enjoyment of these possessions they will never live to witness, without their passionate zeal in the pursuit being in any way cooled by the discouraging reflection. Does not this oblige us to confess that the posthumous existence Mr. Harrison describes is not altogether an airy fiction? Still, somehow, after a few moments spent in the thin atmosphere into which his brilliant language and unselfish imagination have combined to raise us, we—ninety-nine out of every hundred of us at the least—sink back breathless and wearied after the unaccustomed soaring amid light so dim, and craving as of yore after something more personal, more solid, and more *certain*.

To that more solid certainty I am obliged to confess, sorrowfully and with bitter disappointment, that I can contribute nothing—nothing, I mean, that resembles evidence, that can properly be called argument, or that I can hope will be received as even the barest confirmation. Alas! *can* the wisest and most sanguine of us all bring anything beyond our own personal sentiments to swell the common hope? We have aspirations to multiply, but who has any *knowledge* to enrich our store? I have of course read most of the pleadings in favor of the ordinary doctrine of the Future State; naturally also, in common with all graver natures, I have meditated yet more; but these pleadings, for the most part, sound to anxious ears little else than the passionate outcries of souls that cannot endure to part with hopes on which they have been nurtured and which are intertwined with their tenderest affections. Logical reasons to *compel* conviction, I have met with none—even from the interlocutors in this actual Symposium. Yet few can have sought for such more yearningly. I may say I share in the anticipations of believers; but I share them as aspirations, sometimes approaching almost to a faith, occasionally and for a few moments perhaps rising into something like a trust, but never able to settle into the consistency of a definite and enduring creed. I do not know how far even this incomplete state of

mind may not be merely the residuum of early upbringing and habitual associations. But I must be true to my darkness as courageously as to my light. I cannot rest in comfort on arguments that to my spirit have no cogency, nor can I pretend to respect or be content with reasons which carry no penetrating conviction along with them. I will not make buttresses do the work or assume the posture of foundations. I will not cry 'Peace, peace, when there is no peace.' I have said elsewhere and at various epochs of life why the ordinary 'proofs' confidently put forward and gorgeously arrayed 'have no help in them;' while, nevertheless, the pictures which imagination depicts are so inexpressibly alluring. The more I think and question the more do doubts and difficulties crowd around my horizon and cloud over my sky. Thus it is that I am unable to bring aid or sustainment to minds as troubled as my own, and perhaps less willing to admit that the great enigma is, and must remain, insoluble. Of two things, however, I feel satisfied—that the negative doctrine is no more susceptible of proof than the affirmative, and that our opinion, be it only honest, can have no influence whatever on the issue, nor upon its bearing on ourselves.

Two considerations that have been borne in upon my mind while following this controversy may be worth mentioning, though neither can be called exactly helpful. One is that we find the most confident, unquestioning, dogmatic belief in heaven (and its correlative) in those whose heaven is the most unlikely and impossible, the most entirely made up of mundane and material elements, of gorgeous glories and of fading splendors*—just such things as uncultured and undisciplined natures most envied orpined

after on earth, such as the lower order of minds could best picture and would naturally be most dazzled by. The higher intelligences of our race, who need a spiritual heaven, find their imaginations fettered by the scientific training which, imperfect though it be, clips their wings in all directions, forbids their glowing fancy, and annuls that gorgeous creation, and bars the way to each successive local habitation that is instinctively wanted to give reality to the ideal they aspire to; till, in the effort to frame a future existence without a future world, to build up a state of being that shall be worthy of its denizens, and from which everything material shall be excluded, they at last discover that in renouncing the 'physical' and inadmissible they have been forced to renounce the 'conceivable' as well; and a dimness and fluctuating uncertainty gathers round a scene, from which all that is concrete and definable, and would therefore be incongruous, has been shut out. The next world cannot, it is felt, be a material one; and a truly 'spiritual' one even the saint cannot conceive so as to bring it home to natures still shrouded in the garments of the flesh.

The other suggestion that has occurred to me is this:—It must be conceded that the doctrine of a future life is by no means as universally diffused as it is the habit loosely to assert. It is not always discoverable among primitive and savage races. It existed among pagan nations in a form so vague and hazy as to be describable rather as a dream than a religious faith. It can scarcely be determined whether the Chinese, whose cultivation is perhaps the most ancient existing in the world, can be ranked among distinct believers; while the conception of *Nirvana*, which prevails in the meditative minds of other Orientals, is more a sort of conscious non-existence than a future life. With the Jews, moreover, as is well known, the belief was not indigenous, but imported, and by no means an early importation. But what is not so generally recognised is that, even among ourselves in these days, the conviction of thoughtful natures varies curiously in strength and in features at different periods of life. In youth, when all our sentiments are most vivacious and dogmatic, most of us not only cling to it as an in-

* 'There may be crowns of material splendor, there may be trees of unfading loveliness, there may be pavements of emerald, and canopies of the brightest radiance, and gardens of deep and tranquil security, and palaces of proud and stately decoration, and a city of lofty pinacles, through which there unceasingly flows a river of gladness, and where jubilee is ever sung by a concord of seraphic voices.'—*Dr. Chalmers's Sermons*.

† 'Poor fragments all of this low earth—
Such as in dreams could hardly soothe
A soul that once had tasted of immortal truth.'—*Christian Year*.

tellectual creed, but are accustomed to say and feel that, without it as a solace and a hope to rest upon, this world would be stripped of its deepest fascinations. It is from minds of this age, whose vigor is unimpaired and whose relish for the joys of earth is most expansive, that the most glowing delineations of heaven usually proceed, and on whom the thirst for felicity and knowledge, which can be slaked at no earthly fountains, has the most exciting power. Then comes the busy turmoil of our mid-career, when the present curtains off the future from our thoughts, and when a renewed existence in a different scene is recalled to our fancy chiefly in crises of bereavement. And finally, is it not the case that in our fading years—when something of the languor and placidity of age is creeping over us, just when futurity is coming consciously and rapidly more near, and when one might naturally expect it to occupy us more incessantly and with more anxious and searching glances—we think of it less frequently, believe in it less confidently, desire it less eagerly than in our youth? Such, at least, has been my observation and experience, especially among the more reflective and inquiring order of men. The life of the hour absorbs us most completely, as the hours grow fewer and less full; the pleasures, the exemptions, the modest interests, the afternoon peace, the gentle affections of the present scene, obscure the future from our view, and render it, curiously enough, even less interesting than the past. To-day, which may be our last, engrosses us far more than to-morrow, which may be our FOREVER; and the grave into which we are just stepping down troubles us far less than in youth, when half a century lay between us and it.

What is the explanation of this strange phenomenon? Is it a merciful dispensation arranged by the Ruler of our life to soften and to ease a crisis which would be too grand and awful to be faced with dignity or calm, if it were actually *realised* at all? Is it that thought—or that vague substitute for thought which we call time—has brought us, half unconsciously, to the conclusion that the whole question is insoluble, and that reflection is wasted where reflection can bring us no nearer to an issue? Or

finally, as I know is true far oftener than we fancy, is it that threescore years and ten have quenched the passionate desire for life with which at first we stepped upon the scene? We are tired, some of us, with unending and unprofitable toil; we are satiated, others of us, with such ample pleasures as earth can yield us; we have had enough of ambition, alike in its successes and its failures; the joys and blessings of human affection on which, whatever their crises and vicissitudes, no righteous or truthful man will cast a slur, are yet so blended with pains which partake of their intensity; the thirst for knowledge is not slaked, indeed, but the capacity for the labor by which alone it can be gained has consciously died out; the appetite for life, in short, is gone, the frame is worn and the faculties exhausted; and—possibly this is the key to the phenomenon we are examining—*age CANNOT*, from the very law of its nature, *conceive itself endowed with the bounding energies of youth*, and without that vigor both of exertion and desire, renewed existence can offer no inspiring charms. Our being upon earth has been enriched by vivid interests and precious joys, and we are deeply grateful for the gift; but we are wearied with one life, and feel scarcely qualified to enter on the claims, even though balanced by the felicities and glories, of another. It may be the fatigue which comes with age—fatigue of the fancy as well as of the frame; but somehow, what ye yearn for most instinctively at last is *rest*, and the peace which we can imagine the easiest because we know it best is that of sleep.

REV. BALDWIN BROWN.

The theologians appear to have fallen upon evil days. Like some of old, they are filled with rebuke from all sides. They are bidden to be silent, for their day is over. But some things, like Nature, are hard to get rid of. Expelled, they 'recur' swiftly. Foremost among these is theology. It seems as if nothing could long restrain man from this, the loftiest exercise of his powers. The theologians and the Comtists have met in the sense which Mr. Huxley justly indicates; he is himself working at the foundations of a larger, nobler, and more complete theology. But for the present,

theology suffers affliction, and the theologians have in no small measure themselves to thank for it. The protest rises from all sides, clear and strong, against the narrow, formal, and, in these last days, selfish system of thought and expectation, which they have presented as their kingdom of Heaven to the world.

I never read Mr. Harrison's brilliant essays, full as they always are of high aspiration and of stimulus to noble endeavor, without finding the judgment which I cannot but pass in my own mind on his unbeliefs and denials, largely tempered by thankfulness. I rejoice in the passionate earnestness with which he lifts the hearts of his readers to ideals which it seems to me that Christianity—that Christianity which as a living force in the Apostles' days turned the world upside down, that is, right side up, with its face towards heaven and God—alone can realise for man.

I recall a noble passage written by Mr. Harrison some years ago. 'A religion of action, a religion of social duty, devotion to an intelligible and sensible Head, a real sense of incorporation with a living and controlling force, the deliberate effort to serve an immortal Humanity—this, and this alone, can absorb the musings and the cravings of the spiritual man.*' It seems to me that it would be difficult for any one to set forth in more weighty and eloquent words the kind of object which Christianity proposes, and the kind of help towards the attainment of the object which the Incarnation affords. And in the matter now under debate, behind the stern denunciation of the selfish striving towards a personal immortality which Mr. Harrison utters with his accustomed force, there seems to lie not only a yearning for, but a definite vision of, an immortality which shall not be selfish, but largely fruitful to public good. It is true that, as has been forcibly pointed out, the form which it wears is utterly vain and illusory, and wholly incapable, one would think, of accounting for the enthusiastic eagerness with which it appears to be sought. May not the eagerness be really kindled by a larger and more far-reaching vision—the Christian vision, which has become obscured to so many faithful servants of

duty by the selfishness and vanity with which much that goes by the name of the Christian life in these days has enveloped it; but which has not ceased and will not cease, in ways which even consciousness cannot always trace, to cast its spell on human hearts?

Mr. Harrison seems to start in his argument with the conviction that there is a certain baseness in this longing for immortality, and he falls on the belief with a fierceness which the sense of its baseness alone could justify. But surely he must stamp much more with the same brand. Each day's struggle to live is a bit of the baseness, and there seems to be no answer to Mr. Hutton's remark that the truly unselfish action under such conditions would be suicide. But at any rate it is clear from history that the men who formulated the doctrine and perfected the art of suicide in the early days of Imperial Rome, belonged to the most basely selfish and heartless generation that has ever cumbered this sorrowful world. The love of life is on the whole a noble thing, for the staple of life is duty. The more I see of classes in which at first sight selfishness seems to reign, the more am I struck with the measure in which duty, thought for others, and work for others, enters into their lives. The desire to live on, to those who catch the Christian idea, and would follow Him who 'came, not to be ministered unto, but to minister,' is a desire to work on, and by living to bless more richly a larger circle in a wider world.

I can even cherish some thankfulness for the fling at the eternity of the tabor in which Mr. Harrison indulges, and which draws on him a rebuke from his critics the severity of which one can also well understand. It is a last fling at the *laus perennis*, which once seemed so beautiful to monastic hearts, and which, looked at ideally, to those who can enter into Mr. Hutton's lofty view of adoration, means all that he describes. But practically it was a very poor, narrow, mechanical thing; and base even when it represented, as it did to multitudes, the loftiest form of a soul's activity in such a sad suffering world as this. I, for one, can understand, though I could not utter, the anathema which follows it as it vanishes from sight. And it bears closely on the matter in hand. It is no

* *Fortnightly Review*, vol. xlii. p. 529.

dead mediæval idea. It tinctures strongly the popular religious notions of heaven. The favorite hymns of the evangelical school are set in the same key. There is an easy, self-satisfied, self-indulgent temper in the popular way of thinking and praying, and above all of singing, about heaven, which, sternly as the singers would denounce the cloister, is really caught from the monastic choir. There is a very favorite verse which runs thus :—

There, on a green and flowery mount,
Our weary souls shall sit,
And with transporting joys recount
The labors of our feet.*

It is a fair sample of the staple of much pious forecasting of the occupations and enjoyments of heaven. I cannot but welcome very heartily any such shock as Mr. Harrison administers to this restful and self-centred vision of immortality. Should he find himself at last endowed with the inheritance which he refuses, and be thrown in the way of these souls mooning on the mount, it is evident that he would feel tempted to give them a vigorous shake, and to set them with some stinging words about some good work for God and for their world. And as many of us want the shaking now badly enough, I can thank him for it, although it is administered by an over-rough and contemptuous hand.

I feel some hearty sympathy, too, with much which he says about the unity of the man. The passage to which I refer commences on page 632 with the words 'The philosophy which treats man as man simply affirms that man loves, thinks, acts, not that the ganglia, the senses, or any organ of man, loves, thinks, and acts.'

So far as Mr. Harrison's language and line of thought are a protest against the vague, bloodless, bodiless notion of the life of the future, which has more affinity with Hades than with Heaven, I heartily thank him for it. Man is an embodied spirit, and wherever his lot is cast he will need and will have the means of a spirit's manifestation to and action on its surrounding world. But this is precisely what is substantiated by the Resurrection. The priceless value of the truth

of the Resurrection lies in the close interlacing and interlocking of the two worlds which it reveals. It is the life which is lived here, the life of the embodied spirit, which is carried through the veil and lived there. The wonderful power of the Gospel of 'Jesus and the Resurrection' lay in the homely human interest which it lent to the life of the immortals. The risen Lord took up life just where He left it. The things which He had taught His disciples to care about here, were the things which those who had passed on were caring about there, the reign of truth, righteousness, and love. I hold to the truth of the Resurrection, not only because it appears to be firmly established on the most valid testimony, but because it alone seems to explain man's constitution as a spirit embodied in flesh which he is sorely tempted to curse as a clog. It furnishes to man the key to the mystery of the flesh on the one hand, while on the other it justifies his aspiration and realises his hope.

Belief in the risen and reigning Christ was at the heart of that wonderful uprising and outburst of human energy which marked the age of the Advent. The contrast is most striking between the sad and even despairing tone which breathes through the noblest heathen literature, which utters perhaps its deepest wail in the cry of Epictetus, 'Show me a Stoic—by heaven I long to see a Stoic,' and the sense of victorious power, of buoyant exulting hope, which breathes through the world and shines from the life of the infant Church. 'As dying, and behold we live; as sorrowful, yet always rejoicing; as poor, yet making many rich; as having nothing, and yet possessing all things.' The Gospel which brought life and immortality to light won its way just as dawn wins its way, when 'jocund day stands tiptoe on the misty mountain tops,' and flashes his rays over a sleeping world. Everywhere the radiance penetrates; it shines into every nook of shade; and all living creatures stir, awake, and come forth to bask in its beams. Just thus the flood of kindling light streamed forth from the Resurrection, and spread like the dawn in the morning sky; it touched all forms of things in a dark, sad world with its splendor, and called man forth from the tomb

* Mr. Martin's picture of the Plains of Heaven exactly present it, and it is a picture greatly admired in the circles of which we speak.

in which his higher life seemed to be buried, to a new career of fruitful, sunlit activity; even as the Saviour prophesied, 'The hour is coming, and now is, when the dead shall hear the voice of the Son of God, and they that hear shall live.'

The exceeding readiness and joyfulness with which the truth was welcomed, and the measure in which Christendom—and that means all that is most powerful and progressive in human society—has been moulded by it, are the most notable facts of history. Be it truth, be it fiction, be it dream, one thing is clear: it was a baptism of new life to the world which was touched by it, and it has been near the heart of all the great movements of human society from that day until now. I do not even exclude 'the Revolution,' whose current is under us still. Space is precious, or it would not be difficult to show how deeply the Revolution was indebted to the ideas which this gospel brought into the world. I entirely agree with Lord Blachford that Revelation is the ground on which faith securely rests. But the history of the quickening and the growth of Christian society is a factor of enormous moment in the estimation of the arguments for the truth of immortality. We are assured that the idea had the dullest and even basest origin. Man has a shadow, it suggested the idea of a second self to him! he has memories of departed friends, he gave them a body and made them ghosts! Very wonderful surely, that mere figments should be the strongest and most productive things in the whole sphere of human activity, and should have stirred the spirit and led the march of the strongest, noblest, and most cultivated peoples; until now, in this nineteenth century, we think that we have discovered, as Miss Martineau tersely puts it, that 'the theological belief of almost everybody in the civilised world is baseless.' Let who will believe it, I cannot.

It may be urged that the idea has strong fascination, that man naturally longs for immortality, and gladly catches at any figment which seems to respond to his yearning and to justify his hope. But this belief is among the clearest, broadest, and strongest features of his experience and history. It must flow out of something very deeply imbedded

in his constitution. If the force that is behind all the phenomena of life is responsible for all that is, it must be responsible for this also. Somehow man, the masterpiece of the Creation, has got himself wedded to the belief that all things here have relations to issues which lie in a world that is behind the shadow of death. This belief has been at the root of his highest endeavor and of his keenest pain; it is the secret of his chronic unrest. Now Nature through all her orders appears to have made all creatures contented with the conditions of their life. The brute seems fully satisfied with the resources of his world. He shows no sign of being tormented by dreams; his life withers under no blight of regret. All things rest, and are glad and beautiful in their spheres. Violate the order of their nature, rob them of their fit surroundings, and they grow restless, sad, and poor. A plant shut out from light and moisture will twist itself into the most fantastic shapes, and strain itself to ghastly tenacity; nay, it will work its delicate tissues through stone walls or hard rock, to find what its nature has made needful to its life. Having found it, it rests and is glad in its beauty once more. Living things, perverted by human intelligent effort, revert swiftly the moment that the pressure is removed. This marked tendency to reversion seems to be set in Nature as a sign that all things are at rest in their natural conditions, content with their life and its sphere. Only in ways of which they are wholly unconscious, and which rob them of no contentment with their present, do they prepare the way for the higher developments of life.

What then means this restless longing in man for that which lies beyond the range of his visible world? Has Nature wantonly and cruelly made man, her masterpiece, alone of all the creatures restless and sad? Of all beings in the Creation must he alone be made wretched by an unattainable longing, by futile dreams of a visionary world? This were an utter breach of the method of Nature in all her operations. It is impossible to believe that the harmony that runs through all her spheres fails and falls into discord in man. The very order of Nature presses us to the conviction that this insatiable longing which somehow she

generates and sustains in man, and which is unquestionably the largest feature of his life, is not visionary and futile, but profoundly significant; pointing with firm finger to the reality of that sphere of being to which she has taught him to lift his thoughts and aspirations, and in which he will find, unless the prophetic order of the Creation has lied to him, the harmonious completeness of his life.

And there seems to be no fair escape from the conclusion by giving up the order, and writing Babel on the world and its life. Whatever it is, it is not confusion. Out of its disorder, order palpably grows; out of its confusion arises a grand and stately progress. Progress is a sacred word with Mr. Harrison. In the progress of humanity he finds his longed-for immortality. But, if I may repeat in other terms a remark which I offered in the first number of this Review, while progress is the human law, the world, the sphere of the progress, is tending slowly but inevitably to dissolution. Is there discord again in this highest region? Mr. Harrison writes of an immortal humanity. How immortal, if the glorious progress is striving to accomplish itself in a world of wreck? Or is the progress that of a race born with sore but joyful travail from the highest level of the material creation into a higher region of being, whence it can watch with calmness the dissolution of all the perishable worlds?

The belief in immortality is so dear to man because he grasps through it the complement of his else unshaped and imperfect life. It seems to be equally the complement of this otherwise hopelessly jangled and disordered world. It is asked triumphantly: Why of all the hosts of creatures does man alone lay claim to this great inheritance? Because in man alone we see the experiences, the strain, the anguish, that demand it, as the sole key to what he does and endures. There is to me something horrible in the thought of such a life as ours, in which for all of us, in some form or other, the Cross must be the most sacred symbol, lived out in that bare, heartless, hopeless world of the material, to which Professor Clifford so lightly limits it. And I cannot but think that there are strong signs in many quarters of an almost fierce revulsion from the

ghastly dreariness of such a vision of life.

There seems to me to run through Mr. Harrison's utterances on these great subjects—I say it with honest diffidence of one whose large range of power I so fully recognise, but one must speak frankly if this Symposium is to be worth anything—an instinctive yearning towards Christian ideas, while that faith is denied which alone can vivify them and make them a living power in our world. There is everywhere a shadowy image of a Christian substance; but it reminds one of that formless form, wherein 'what seemed a head, the likeness of a kingly crown had on.' And it is characteristic of much of the finest thinking and writing of our times. The saviour Deronda, the prophet Mordecai, lack just that living heart of faith which would put blood into their pallid lineaments, and make them breathe and move among men. Again, I say that we have largely ourselves to thank for this saddening feature of the higher life of our times—we who have narrowed God's great kingdom to the dimensions of our little theological sphere. I am no theologian, though intensely interested in the themes with which the theologians occupy themselves. Urania, with darkened brow, may perhaps rebuke my prating. But I seem to see quite clearly that the sad strain and anguish of our life, social, intellectual, and spiritual, is but the pain by which great stages of growth accomplish themselves. We have quite outgrown our venerable, and in its time large and noble, theological shell. We must wait, not fearful, far less hopeless, while by the help of those who are working with such admirable energy, courage, and fidelity, outside the visible Christian sphere, that spirit in man which searches and cannot but search 'the deep things of God,' creates for itself a new instrument of thought which will give to it the mastery of a wider, richer, and nobler world.

DR. W. G. WARD.

Mr. Harrison considers that the Christian's conception of a future life is 'so gross, so sensual, so indolent, so selfish,' as to be unworthy of respectful consideration. He must necessarily be intending to speak of this conception in the

shape in which we Christians entertain it; because otherwise his words of reprehension are unmeaning. But our belief as to the future life is intimately and indissolubly bound up with our belief as to the present; with our belief as to what is the true measure and standard of human action in this world. And I would urge that no part of our doctrine can be rightly apprehended, unless it be viewed in its connection with all the rest. This is a fact which (I think) infidels often drop out of sight, and for that reason fail of meeting Christianity on its really relevant and critical issues.

Of course I consider Catholicity to be exclusively the one authoritative exhibition of revealed Christianity. I will set forth therefore the doctrine to which I would call attention, in that particular form in which Catholic teachers enounce it; though I am very far indeed from intending to deny, that there are multitudes of non-Catholic Christians who hold it also. What then, according to Catholics, is the true measure and standard of human action? This is in effect the very first question propounded in our English elementary Catechism. 'Why did God make you?' The prescribed answer is, 'To know Him, serve Him, and love Him in this world, and to be happy with Him for ever in the next.' And St. Ignatius's *Spiritual Exercises*—a work of the very highest authority among us—having laid down the very same 'foundation,' presently adds, that 'we should not wish on our part for health rather than for sickness, wealth rather than poverty, honor rather than ignominy; desiring and choosing those things alone, which are more expedient to us for the end for which we were created.' Now what will be the course of a Christian's life in proportion as he is profoundly imbued with such a principle as this, and vigorously aims at putting it into practice? The number of believers, who apply themselves to this task with reasonable consistency, is no doubt comparatively small. But in proportion as any given person does so, he will in the first place be deeply penetrated with a sense of his moral weakness; and (were it for that reason alone) his life will more and more be a life of prayer. Then he will necessarily give his mind with great earnestness and frequency to

the consideration, what it is which at this or that period God desires at his hands. On the whole (not to dwell with unnecessary detail on this part of my subject) he will be ever opening his heart to Almighty God; turning to Him for light and strength under emergencies, for comfort under affliction; pondering on His adorable attributes; animated towards Him by intense love and tenderness. Nor need I add how singularly—how beyond words—this personal love of God is promoted and facilitated by the fact, that a Divine Person has assumed human nature, and that God's human acts and words are so largely offered to the loving contemplation of redeemed souls.

In proportion then as a Christian is faithful to his creed, the thought of God becomes the chief joy of his life. 'The thought of God,' says F. Newman, 'and nothing short of it, is the happiness of man; for though there is much besides to serve as subject of knowledge, or motive for action, or instrument of excitement, yet the *affections* require a something more vast and more enduring than anything created. He alone is sufficient for the heart who made it. The contemplation of Him, and nothing but it, is able fully to open and relieve the mind, to unlock, occupy, and fix our affections. We may indeed love things created with great intenseness; but such affection, when disjoined from the love of the Creator, is like a stream running in a narrow channel, impetuous, vehement, turbid. The heart runs out, as it were, only at one door; it is not an expanding of the whole man. Created natures cannot open to us, or elicit, the ten thousand mental senses which belong to us, and through which we really love. None but the presence of our Maker can enter us; for to none besides can the whole heart in all its thoughts and feelings be unlocked and subjected. It is this feeling of simple and absolute confidence and communion, which soothes and satisfies those to whom it is vouchsafed. We know that even our nearest friends enter into us but partially, and hold intercourse with us only at times; whereas the consciousness of a perfect and enduring presence, and it alone, keeps the heart open. Withdraw the object on which it rests, and it will re-

lapse again into a state of confinement and constraint; and in proportion as it is limited, either to certain seasons or to certain affections, the heart is straitened and distressed.'

Now Christians hold, that God's faithful servants will enjoy hereafter unspeakable bliss, through the most intimate imaginable contact with Him whom they have here so tenderly loved. They will see face to face Him, whose beauty is dimly and faintly adumbrated by the most exquisitely transporting beauty which can be found on earth; Him whose adorable perfections they have in this life imperfectly contemplated, and for the fuller apprehension of which they have so earnestly longed here below. I by no means intend to imply, that the hope of this blessedness is the sole or even the chief inducement which leads saintly men to be diligent in serving God. Their immediate reason for doing so is their keen sense of His claim on their allegiance; and, again, the misery which they would experience, through their love of Him, at being guilty of any failure in that allegiance. Still the prospect of that future bliss, which I have so imperfectly sketched, is doubtless found by them at times of invaluable service, in stimulating them to greater effort, and in cheering them under trial and desolation.

Such is the view taken by Christians of life in heaven; and surely any candid infidel will at once admit, that it is profoundly harmonious and consistent with their view of what should be man's life on earth. To say that their anticipation of the future, *as it exists in them*, is gross, sensual, indolent, and selfish, is so manifestly beyond the mark, that I am sure Mr. Harrison will, on reflection, retract his affirmation. Apart, however, from this particular comment, my criticism of Mr. Harrison would be this. He was bound, I maintain, to consider the Christian theory of life *as a whole*; and not to dissociate that part of it which concerns eternity, from that part of it which concerns time.

And now as to the merits of this Christian theory. For my own part I am, of course, profoundly convinced that, as on the one hand it is guaranteed by Revelation, so on the other hand it is that which alone harmonises with the dicta

of reason and the facts of experience, so far as it comes into contact with these. Yet I admit that various very plausible objections may be adduced against its truth. Objectors may allege very plausibly, that by the mass of men it cannot be carried into practice; that it disparages most unduly the importance of things secular; that it is fatal to what they account genuine patriotism; that it has always been, and will always be, injurious to the progress of science; above all, that it puts men (as one may express it) on an entirely wrong scent, and leads them to neglect many pursuits which, as being sources of true enjoyment, would largely enhance the pleasurable of life. All this, and much more, may be urged, I think, by antitheists with very great superficial plausibility; and the Christian controversialist is bound on occasion steadily to confront it. But there is one accusation which has been brought against this Christian theory of life—and that the one mainly (as would seem) felt by Mr. Harrison—which to me seems so obviously destitute of foundation, that I find difficulty in understanding how any infidel can have persuaded himself of its truth: I mean the accusation that this theory is a *selfish* one. There is no need of here attempting a philosophical discussion on the respective claims of what are now called 'egoism' and 'altruism': a discussion in itself (no doubt) one of much interest and much importance, and one moreover in which I should be quite prepared (were it necessary) to engage. Here, however, I will appeal, not to philosophy but to history. In the records of the past we find a certain series of men, who stand out from the mass of their brethren, as having pre-eminently concentrated their energy on the love and service of God, and pre-eminently looked away from earthly hopes to the prospect of their future reward. I refer to the Saints of the Church. And it is a plain matter of fact, which no one will attempt to deny, that these very men stand out no less conspicuously from the rest, in their self-sacrificing and (as we ordinary men regard it) astounding labors, in behalf of what they believe to be the highest interests of mankind.

Before I conclude I must not omit a brief comment on one other point, be-

cause it is the only one on which I cannot concur with Lord Blachford's masterly paper. I cannot agree with him, that the doctrine of human immortality fails of being supported by 'conclusive reasoning.' I do not, of course, mean that the dogma of the Beatific Vision is discoverable apart from Revelation; but I do account it a truth cognisable with certitude by reason, that the human soul is naturally immortal, and that retribution of one kind or another will be awarded us hereafter, according to what our conduct has been in this our state of probation. Here, however, I must explain myself. When theists make this statement, sometimes they are thought to allege that human immortality is sufficiently proved by *phenomena*; and sometimes they are thought to allege that it is almost intuitively evident. For myself, however, I make neither of these allegations. I hold that the truth in question is conclusively established by help of certain premisses; and that these premisses themselves can previously be known with absolute certitude, on grounds of reason or experience.

They are such as these: (1) There exists that Personal Being, infinite in all perfections, whom we call God. (2) He has implanted in His rational creatures the sense of right and wrong; the knowledge that a deliberate perpetration of certain acts intrinsically merits penal retribution. (3) Correlatively, He has conferred freedom on the human will; or, in other words, has made acts of the human will exceptions to that law of uniform sequence, which otherwise prevails throughout the phenomenal world.* (4) By the habit of prayer to God we can obtain augmented strength for moral action, in a degree which would have been quite incredible antecedently to experience. (5) Various portions of our divinely given nature clearly point to an eternal destiny. (6) The conscious self or ego is entirely heterogeneous to the material world: entirely heterogeneous, therefore, to that palpable body of ours, which is dissolved at the period of death.

I do not think any one will account it extravagant to hold, that the doctrine of human immortality is legitimately de-

ducible from a combination of these and similar truths. The antitheist will of course deny that they *are* truths. Mr. Greg, who has himself 'arrived at no conviction' on the subject of immortality, yet says that considerations of the same kind as those which I have enumerated 'must be decisive' in favor of immortality 'to all to whose spirits communion with their Father is the most absolute of verities.'* Nor have I any reason to think that even Mr. Huxley and Mr. Harrison, if they could concede my premisses, would demur to my conclusion.

MR. FREDERIC HARRISON.

[I have now, not so much to close a symposium, or general discussion, as to reply to the convergent fire of nine separate papers, extending over more than fifty pages. Neither time, nor space, nor the indulgence of the reader, would enable me to do justice to the weight of this array of criticism, which reaches me in fragments whilst I am otherwise occupied abroad. I will ask those critics, whom I have not been able to notice, to believe that I have duly considered the powerful appeals they have addressed to me. And I will ask those who are interested in this question, to refer to the original papers in which my views were stated. And I will only add, by way of reply, the following remarks which were, for the most part, written and printed, whilst I had nothing before me but the first three papers in this discussion. They contain what I have to say on the theological, the metaphysical, and the materialist aspect of this question. For the rest, I could only repeat what I have already said in the two original essays.]

Whether the preceding discussion has given much new strength to the doctrine of man's immaterial Soul and Future existence I will not pretend to decide. But I cannot feel that it has shaken the reality of man's posthumous influence, my chief and immediate theme. It seemed to me that 'the time had come, when, seeing how vague and hesitating were the prevalent beliefs on this subject, it was most important to remember that, from a purely earthly point of view,

* I shall not, of course, be understood to deny the existence and frequency of miracles.

NEW SERIES.—VOL. XXVI., No. 6

* See his letter in the *Spectator* of August 25.

man had a spiritual nature, and could look forward after death to something that marked him off from the beasts that perish. I cannot see that what I urged has been in substance displaced; though much criticism (and some of it of a verbal kind) has been directed at the language which I used of others. My object was to try if this life could not be made richer; not to destroy the dreams of another. But has the old doctrine of a future life been in any way strengthened? Mr. Hutton, it is true, has a 'personal wish' for a perpetuity of volition. Lord Blachford 'believes because he is told.' And Professor Huxley knows of no evidence that 'such a soul and a future life exist;' and he seems not to believe in them at all.

Philosophical discussion must languish a little, if, when we ask for the philosophical grounds for a certain belief, we find one philosopher believing because he has a 'personal wish' for it, and another 'believing because he is told.' Mr. Hutton says that, as far as he knows, 'the thoughts, affections, and volitions are not likely to perish with his body.' Professor Huxley seems to think it just as likely that they should. Arguments are called for to enable us to decide between these two authorities. And the only argument we have hitherto got is Mr. Hutton's 'personal wish,' and Lord Blachford's *ita scriptum est*. I confess myself unable to continue an argument which runs into believing 'because I am told.' It is for this reason that the lazarone at Naples believes in the blood of St. Januarius.

My original propositions may be stated thus.

1. Philosophy as a whole (I do not say specially biological science) has established a functional relation to exist between every fact of thinking, willing, or feeling, on the one side, and some molecular change in the body on the other side.

2. This relation is simply one of correspondence between moral and physical facts, not one of assimilation. The moral fact does not become a physical fact, is not adequately explained by it, and must be mainly studied as a moral fact, by methods applicable to morals—not as a physical fact, by methods applicable to physics.

3. The moral facts of human life, the laws of man's mental, moral, and affective nature, must consequently be studied, as they have always been studied, by direct observation of these facts; yet the correspondences, specially discovered by biological science between man's mind and his body, must always be kept in view. They are an indispensable, inseparable, but subordinate part of moral philosophy.

4. We do not diminish the supreme place of the spiritual facts in life and in philosophy by admitting these spiritual facts to have a relation with molecular and organic facts in the human organism—provided that we never forget how small and dependent is the part which the study of the molecular and organic phenomena must play in moral and social science.

5. Those whose minds have been trained in the modern philosophy of law cannot understand what is meant by sensation, thought, and energy, existing without any basis of molecular change; and to talk to them of sensation, thought, and energy, continuing in the absence of any molecules whatever, is precisely such a contradiction in terms as to suppose that civilisation will continue in the absence of any men whatever.

6. Yet man is so constituted as a social being, that the energies which he puts out in life mould the minds, characters, and habits of his fellow-men; so that each man's life is, *in effect*, indefinitely prolonged in human society. This is a phenomenon quite peculiar to man and to human society, and of course depends on there being men in active association with each other. Physics and biology can teach us nothing about it; and physicists and biologists may very easily forget its importance. It can be learnt only by long and refined observations in moral and mental philosophy as a whole, and in the history of civilisation as a whole.

7. Lastly, as a corollary, it may be useful to retain the words Soul and Future Life for their associations; provided we make it clear that we mean by Soul the combined faculties of the *living* organism, and by future life the subjective effect of each man's objective life on the actual lives of his fellow-men.

I. Now I find in Mr. Hutton's paper

hardly any attempt to disprove the first six of these propositions. He is employed for the most part in asserting that his hypothesis of a future state is a more agreeable one than mine, and in earnest complaints that I should call his view of a future state a selfish or personal hope. As to the first, I will only remark that it is scarcely a question whether his notion of immortality is beautiful or not, but whether it is true. 'If there is no rational ground for expecting such immortality to be a solid fact, it is to little purpose to show us what a sublime idea it would be if there were anything in it. As to the second, I will only say that I do not call his notion of a future existence a selfish or personal hope. In the last paragraph of my second paper I speak with respect of the opinion of those who look forward to a future of moral development instead of to an idle eternity of psalm-singing. My language as to the selfishness of the vulgar ideas of salvation was directed to those who insist that unless they are to *feel* a continuance of pleasure they do not care for any continuance of their influence at all. The vulgar are apt to say that what they desire is the sense of personal satisfaction, and if they cannot have this they care for nothing else. This, I maintain, is a selfish and debasing idea. It is the common notion of the popular religion, and its tendency to concentrate the mind on a merely personal salvation does exert an evil effect on practical conduct. I once heard a Scotch preacher, dilating on the narrowness of the gate, &c., exclaim, 'O dear brethren, who would care to be saved in a crowd?'

I do not say this of the life of grander activity in which Mr. Hutton believes, and which Lord Blachford so eloquently describes. This is no doubt a fine ideal, and I will not say other than an elevating hope. But on what does it rest? Why this ideal rather than any other? Each of us may imagine, as I said at the outset, his own Elysian fields, or his own mystic rose. But is this philosophy? Is it even religion? Besides, there is this other objection to it. It is not Christianity, but Neo-Christianity. It is a fantasia with variations on the orthodox creed. There is not a word of the kind in the Bible. Lord Blachford says he believes in it, 'because he is

told.' But it so happens that he is not told this, at any rate in the creeds and formularies of orthodox faith. If this view of future life is to rest entirely on revelation, it is a very singular thing that the Bible is silent on the matter. Whatever kind of future ecstasy may be suggested in some texts, certain it is that such a glorified energy as Lord Blachford paints in glowing colors is nowhere described in the Bible. There is a constant practice nowadays, when the popular religion is criticised, that earnest defenders of it come forward exclaiming: 'Oh! that is only the vulgar notion of our religion. My idea of the doctrine is so and so,' something which the speaker has invented without countenance from official authority. For my part I hold Christianity to be what is taught in average churches and chapels to the millions of professing Christians. And I say it is a very serious fact when philosophical defenders of religion begin by repudiating that which is taught in average pulpits.

Perhaps a little more attention to my actual words might have rendered unnecessary the complaints in all these papers as to my language about the hopes, which men cherish for the future. In the first place I freely admit that the hopes of a grander energy in heaven are not open to the charge of vulgar selfishness. I said that they are unintelligible, not that they are unworthy. They are unintelligible to those who are continually alive to the fact I have placed as my first proposition—*that every moral phenomenon is in functional relation with some physical phenomenon*. To those who deny or ignore this truth, there is doubtless no incoherence in all the ideals so eloquently described in the papers of Mr. Hutton and Lord Blachford. But once get this conception as the substratum of your entire mental and moral philosophy, and it is as incoherent to talk to us of your immaterial development as it would be to talk of obtaining redness without any red thing.

I will try to explain fully why this idea of a glorified activity implies a contradiction in terms to those who are imbued with the sense of correspondence between physical and moral facts. When we conceive any process of thinking, we call up before us a complex train of con-

ditions; objective facts outside of us or the revived impression of such facts; the molecular effect of these facts upon certain parts of our organism, the association of these with similar facts recalled by memory, an elaborate mechanism to correlate these impressions, an unknown to be made known, and a difficulty to be overcome. All systematic thought implies relations with the external world present or recalled, and it also implies some shortcoming in our powers of perfecting those relations. When we meditate, it is on a basis of facts which we are observing, or have observed and are now recalling, and with a view to get at some result which baffles our direct observation and hinders some practical purpose.

The same holds good of our moral energy. Ecstasy and mere adoration exclude energy of action. Moral development implies difficulties to be overcome, qualities balanced against one another under opposing conditions, this or that appetite tempted, this or that instinct tested by proof. Moral development does not grow like a fungus; it is a continual struggle in surrounding conditions of a specific kind, and an active putting forth of a variety of practical faculties in the midst of real obstacles.

So, too, of the affections, they equally imply conditions. Sympathy does not spurt up like a fountain in the air; it implies beings in need of help, evils to be alleviated, a fellowship of giving and taking, the sense of protecting and being protected, a pity for suffering, an admiration of power, goodness, and truth. All of these imply an external world to act in, human beings as objects, and human life under human conditions.

Now all these conditions are eliminated from the orthodox ideal of a future state. There are to be no physical impressions, no material difficulties, no evil, no toil, no struggle, no human beings and no human objects. The only condition is a complete absence of all conditions, or all conditions of which we have any experience. And we say, we cannot imagine what you mean by your intensified sympathy, your broader thought, your infinitely varied activity, when you begin by postulating the absence of all that makes sympathy, thought,

and activity possible, all that makes life really noble.

A mystical and inane ecstasy is an appropriate ideal for this paradise of negations, and this is the orthodox view; but it is not a high view. A glorified existence of greater activity and development may be a high view, but it is a contradiction in terms; exactly, I say, as if you were to talk of a higher civilisation without any human beings. But this is simply a metaphysical afterthought to escape from a moral dilemma. Mr. Hutton is surely mistaken in saying that Positivists have forgotten that Christians ever had any meaning in their hopes of a 'beatific vision.' He must know that Dante and Thomas à Kempis form the religious books of Positivists, and they are, with some other manuals of Catholic theology, amongst the small number of volumes which Comte recommended for constant use. We can see in the celestial 'visions' of a mystical and unscientific age much that was beautiful in its time, though not the highest product even of theology. But in our day these visions of paradise have lost what moral value they had, whilst the progress of philosophy has made them incompatible with our modern canons of thought.

Mr. Hutton supposes me to object to any continuance of sensation as an evil in itself. My objection was not that consciousness should be prolonged in immortality, but that nothing else but consciousness should be prolonged. All real human life, energy, thought, and active affection, are to be made impossible in your celestial paradise, but you insist on retaining consciousness. To retain the power of feeling, whilst all means and object are taken away from thinking, all power of acting, all opportunity of cultivating the faculties of sympathy are stifled: this seems to me something else than a good. It would seem to me, that simply to be conscious, and yet to lie thoughtless, inactive, irresponsible, with every faculty of a man paralysed within you, as if by that villainous drug which produces torpor whilst it intensifies sensation: such a consciousness as this must be a very place of torment.

I think some contradictions which Mr. Hutton supposes he detects in my paper are not very hard to reconcile. I

admitted that Death is an evil, it seems; but I spoke of our posthumous activity as a higher kind of influence. We might imagine, of course, a Utopia with neither suffering, waste, nor loss; and compared with such a world, the world, as we know it, is full of evils, of which Death is obviously one. But relatively, in such a world as alone we know, Death becomes simply a law of organised nature, from which we draw some of our guiding motives of conduct. In precisely the same way the necessity of toil is an evil in itself; but, with man and his life as we know them, we draw from it some of our highest moral energies. The grandest qualities of human nature, such as we know it at least, would become for ever impossible, if Labor and Death were not the law of life.

Mr. Hutton again takes but a pessimist view of life when he insists how much of our activity is evil, and how questionable is the future of the race. I am no pessimist, and I believe in a providential control over all human actions by the great Power of Humanity, which indeed brings good out of evil, and assures, at least for some thousands of centuries, a certain progress towards the higher state. Pessimism as to the essential dignity of man and the steady development of his race, is one of the surest marks of the enervating influence of this dream of a celestial glory. If I called it as wild a desire as to go roving through space in a comet, it is because I can attach no meaning to a *human* life to be prolonged without a human frame and a human world; and it seems to me as rational to talk of becoming an angel as to talk of becoming an ellipse.

By 'duties' of the world beyond the grave, I meant the duties which are imposed on us in life, by the certainty that our action must continue to have an indefinite effect. The phrase may be inelegant, but I do not think the meaning is obscure.

II. I cannot agree with Lord Blachford that I have fallen into any confusion between a substance and an attribute. I am quite aware that the word Soul has been hitherto used for some centuries as an entity. And I proposed to retain the term for an attribute. It is a very common process in the history of thought. Electricity, Life, Heat, were

once supposed to be substances. We now very usefully retain these words for a set of observed conditions or qualities.

I agree with Mr. Spencer that the unity of the social organism is quite as complete as that of the individual organism. I do not confuse the two kinds of unity; but I say that man is in no important sense a unit that society is not also a unit.

With regard to the 'percipient' and the 'perceptible' I cannot follow Lord Blachford. He speaks a tongue that I do not understand. I have no means of dividing the universe into 'percipients' and 'perceptibles.' I know no reason why a 'percipient' should not be a 'perceptible,' none why I should not be 'perceptible,' and none why beings about me should not be 'perceptible.' I think we are all perfectly 'perceptible'—indeed some of us are more 'perceptible' than 'percipient'—though I cannot say that Lord Blachford is always 'perceptible' to me. And how does my being 'perceptible,' or not being 'perceptible,' prove that I have an immortal soul? Is a dog 'perceptible,' is he 'percipient'? Has he not some of the qualities of a 'percipient,' and if so, has he an immortal soul? Is an ant, a tree, a bacterium, percipient, and has any of these an immortal soul; for I find Lord Blachford declaring there is an 'ineradicable difference between the motions of a material and the sensations of a living being,' as if the animal world were percipient, and the inorganic perceptible? But surely in the sensations of a living being the animal world must be included. Where does the vegetable world come in?

I used the word 'organism' advisedly, when I said that will, thought, and affection, are functions of a living organism. I decline exactly to localise the organ of any function of mind or will. When I am asked, What are *we*? I reply we are *men*. When I am asked, Are *we* our bodies? I say no, nor are we our minds. Have we no sense of personality, of unity? I am asked. I say certainly; it is an acquired result of our nervous organisation, liable to be interrupted by derangements of that nervous organisation. What is it that makes us think and feel? The facts of our human nature; I cannot get behind this, and I need no fur-

ther explanation. We are men, and can do what men can do. I say the tangible collection of organs known as a 'man' (not the consensus or the condition, but the *man*) thinks, wills, and feels, just as much as that visible organism lives and grows. We do not say that this or that ganglion in particular lives and grows; we say the *man* grows. It is as easy to me to imagine that we shall grow fifteen feet high, when we have no body, as that we shall grow in knowledge, goodness, activity, &c., &c., &c., when we have no organs. And the absence of all molecular attributes would be, I should think, particularly awkward in that life of cometary motion in the interstellar spaces with which Lord Blachford threatens us. But as the poet says:—

Trasumanar significar per verba
Non si porria—

'If,' says he, 'practical duties are necessary for the perfection of life,' we can take a little interstellar exercise. Why, practical duties are the sum and substance of life; and life which does not centre in practical duties is not Life, but a trance.

Lord Blachford, who is somewhat punctilious in terms, asks me what I consider myself to understand 'by the incorporation of a consensus of faculties with a glorious future.' Well! it so happens that I did not use that phrase. I have never spoken of an immortal Soul anywhere, nor do I use the word Soul of any but the living man. I said a man might look forward to incorporation with the future of his race, explaining that to mean his 'posthumous activity.' And I think at any rate the phrase is quite as reasonable as to say that I look forward, as Mr. Hutton does, to a 'union with God.' What does Mr. Hutton, or Lord Blachford, understand himself to mean by that?

Surely Lord Blachford's epigram about the fiddle and the tune is hardly fortunate. Indeed, that exactly expresses what I find faulty in the view of himself and the theologians. He thinks the tune will go on playing when the fiddle is broken up and burned. I say nothing of the kind. I do not say the man will continue to exist after death. I simply say that his influence will; that other men will do and think what he taught

them to do or to think. Just so, a general would be said to win a battle which he planned and directed, even if he had been killed in an early part of it. What is there of fiddle and tune about this? I certainly think that when Mozart and Beethoven have left us great pieces of music, it signifies little to art if the actual fiddle or even the actual composer continue to exist or not. I never said the tune would exist. I said that men would remember it and repeat it. I must thank Lord Blachford for a happy illustration of my own meaning. But it is *he* who expects the tune to exist without the fiddle. I say, you can't have a tune without a fiddle, nor a fiddle without wood.

III. I have reserved the criticism of Professor Huxley, because it lies apart from the principal discussion, and turns mainly on some incidental remarks of mine on 'biological reasoning about spiritual things.'

I note three points at the outset. Professor Huxley does not himself pretend to any evidence for a theological soul and future life. Again, he does not dispute the account I give of the functional relation of physical and moral facts. He seems surprised that I should understand it, not being a biologist; but he is kind enough to say that my statement may pass. Lastly, he does not deny the reality of man's posthumous activity. Now these three are the main purposes of my argument; and in these I have Professor Huxley with me. He is no more of a theologian than I am. Indeed, he is only scandalised that I should see any good in priests at all. He might have said more plainly that, when the man is dead, there is an end of the matter. But this clearly is his opinion, and he intimates as much in his paper. Only he would say no more about it, bury the carcase, and end the tale, leaving all thoughts about the future to those whose faith is more robust and whose hopes are richer; by which I understand him to mean persons weak enough to listen to the priests.

Now this does not satisfy me. I call it materialism, for it exaggerates the importance of the physical facts, and ignores that of the spiritual facts. And the object of my paper was simply this: that as the physical facts are daily grow-

ing quite irresistible, it is of urgent importance to place the spiritual facts on a sound scientific basis at once. Professor Huxley implies that his business is with the physical facts, and the spiritual facts must take care of themselves. I cannot agree with him. That is precisely the difference between us. The spiritual facts of man's nature are the business of all who undertake to denounce priestcraft, and especially of those who preach Lay Sermons.

Professor Huxley complains that I should join in the view-halloo against biological science. Now I never have supposed that biological science was in the position of the hunted fox. I thought it was the hunter, booted and spurred and riding over us all, with Professor Huxley leaping the most terrific gates and cracking his whip with intense gusto. As to biological science, it is the last thing that I should try to run down; and I must protest, with all sincerity, that I wrote without a thought of Professor Huxley at all. He insists on knowing, in the most peremptory way, of whom I was thinking, as if I were thinking of him. Of whom else could I be thinking, forsooth, when I spoke of Biology? Well! I did not bite my thumb at him, but I bit my thumb.

Seriously, I was not writing at Professor Huxley, or I should have named him. I have a very great admiration for his work in biology; I have learned much from him; I have followed his courses of lectures years and years ago, and have carefully studied his books. If, in questions which belong to sociology, morals, and to general philosophy, he seems to me hardly an authority, why need we dispute? Dog should not bite dog; and he and I have many a wolf that we both would keep from the fold.

But if I did not mean Professor Huxley, whom did I mean? Now my paper, I think clearly enough, alluded to two very different kinds of Materialism. There is systematic Materialism, and there is the vague Materialism. The eminent example of the first is the unlucky remark of Cabanis that the brain secretes thought, as the liver secretes bile; and there is much of the same sort in many foreign theories—in the tone of Moleschott, Buchner, and he like. The most distinct examples of

it in this country are found amongst phrenologists, spiritualists, some mental pathologists, and a few communist visionaries. The far wider, vaguer, and more dangerous school of Materialism is found in a multitude of quarters—in all those who insist exclusively on the physical side of moral phenomena—all, in short, who, to use Professor Huxley's phrase, are employed in 'building up a physical theory of moral phenomena.' Those who confuse moral and physical phenomena are indeed few. Those who exaggerate the physical side of moral phenomena are many.

Now, though I did not allude to Professor Huxley in what I wrote, his criticism convinces me that he is sometimes at least found among these last. His paper is an excellent illustration of the very error which I condemned. The issue between us is this:—We both agree that every mental and moral fact is in functional relation with some molecular fact. So far we are entirely on the same side, as against all forms of theological and metaphysical doctrine which conceive the possibility of human feeling without a human body. But then, says Professor Huxley, if I can trace the molecular facts which are the antecedents of the mental and moral facts, I have *explained* these mental and moral facts. That I deny; just as much as I should deny that a chemical analysis of the body could ever lead to an explanation of the physical organism. Then, says the Professor, when I have traced out the molecular facts, I have built up a *physical theory of moral phenomena*. That again I deny. I say there is no such thing, or no rational thing, that can be called a physical theory of moral phenomena; any more than there is a moral theory of physical phenomena. What sort of a thing would be a physical theory of history—history *explained* by the influence of climate or the like? The issue between us centres in this. I say that the physical side of moral phenomena bears about the same part in the moral sciences that the facts about climate bear in the sum of human civilisation. And, that to look to the physical facts as an explanation of the moral, or even as an independent branch of the study of moral facts, is perfectly idle; just as it would be if a mere physical

geographer pretended to give us, out of his geography, a climatic philosophy of history. Yet Professor Huxley has not been deterred from the astounding paradox of proposing to us a *physiological theory of religion*. He tells us how 'the religious feelings may be brought within the range of physiological inquiry.' And he proposes as a problem—'What diseased viscus may have been responsible for the "Priest in Absolution"?' I will drop all epithets; but I must say that I call that materialism, and materialism not very nice of its kind. One might as reasonably propose as a problem—What barometrical readings are responsible for the British Constitution? and suggest a congress of meteorologists to do the work of Hallam, Stubbs, and Freeman. No doubt there is some connection between the House of Commons and the English climate, and so there is no doubt some connection between religious theories and physical organs. But to talk of 'bringing religion within the range of physiological inquiry' is simply to stare through the wrong end of the telescope, and to turn philosophy and science upside down. Ah! Professor Huxley, this is a bad day's work for scientific progress—

ἡ κεν γηθήσαι Πλάτος, Πριάμοι τε παῖδες.

Pope Pius and his people will be glad when they read that fatal sentence of yours. When I complained of 'the attempt to dispose [of the deepest moral truths of human nature on a bare physical or physiological basis,' I could not have expected to read such an illustration of my meaning by Professor Huxley.

Perhaps he will permit me to inform him (since that is the style which he affects) that there once was—and indeed we may say still is—an institution called the Catholic Church; that it has had a long and strange history, and subtle influences of all kinds; and I venture to think that Professor Huxley may learn more about the *Priest in Absolution* by a few weeks' study of the Catholic system than by inspecting the diseased viscera of the whole human race. When Professor Huxley's historical and religious studies 'have advanced so far as to enable him to explain' the history of Catholicism, I think he will admit that 'Priest-

craft' cannot well be made a chapter in a physiological manual. It may be cheap pulpit thunder, but this idea of his of inspecting a 'diseased viscus' is precisely what I meant by 'biological reasoning about spiritual things.' And I stand by it, that it is just as false in science as it is deleterious in morals. It is an attempt (I will not say arrogant, I am inclined to use another epithet) to explain, by physical observations, what can only be explained by the most subtle moral, sociological, and historical observations. It is to think you can find the golden eggs by cutting up the goose, instead of watching the goose to see where she lays the eggs.

I am quite aware that Professor Huxley has elsewhere formulated his belief that Biology is the science which 'includes man and all his ways and works.' If history, law, politics, morals, and political economy, are merely branches of biology, we shall want new dictionaries indeed; and biology will embrace about four fifths of human knowledge. But this is not a question of language; for we here have Professor Huxley actually bringing religion within the range of *physiological* inquiry, and settling its problems by references to 'diseased viscus.' But the differences between us are a long story; and since Professor Huxley has sought me out, and in somewhat monitorial tone has proposed to set me right, I will take an early occasion to try and set forth what I find paradoxical in his notions of the relations of Biology and Philosophy.

I note a few special points between us, and I have done. Professor Huxley is so well satisfied with his idea of a 'physical theory of moral phenomena,' that he constantly attributes that sense to my words, though I carefully guarded my language from such a construction. Thus he quotes from me a passage beginning, 'Man is one, however compound,' but he breaks off the quotation just as I go on to speak of the direct analysis of mental and moral faculties by mental and moral science, not by physiological science. I say: 'philosophy and science' have accomplished explanations; I do not say biology; and the biological part of the explanation is a small and subordinate part of the whole. I do not say that the correspondence between

physical and moral phenomena is an *explanation* of the human organism. Professor Huxley says that, and I call it materialism. Nor do I say that 'spiritual sensibility is a *bodily* function.' I say, it is a moral function; and I complain that Professor Huxley ignores the distinction between moral and physical functions of the human organism.

As to the distinction between anatomy and physiology, if he will look at my words again, he will see that I use these terms with perfect accuracy. Six lines below the passage he quotes, I speak of the human mechanism being only explained by a 'complete anatomy and biology,' showing that anatomy is merely one of the instruments of biology.

He might be surprised to hear that he does not himself give an accurate definition of physiology. But so it is. He says: 'Physiology is the science which treats of the functions of the living organism.' Not so, for the finest spiritual sensibility is, as Professor Huxley admits, a function of a living organism; and physiology is not the science which treats of the spiritual sensibilities. They belong to moral science. There are mental, moral, affective functions of the living organism; and they are not within the province of physiology. Physiology is the science which treats of the *bodily* functions of the living organism; as Professor Huxley says in his admirable *Elementary Lessons*, it deals with the facts 'concerning the action of the *body*.' I complain of the pseudo-science which drops that distinction for a minute. He says: 'The explanation of a physiological function is the demonstration of the connection of that function with the molecular state of the organ which exerts the function.' That I dispute. It is only a small part of the explanation. The explanation substantially is the demonstration of the laws and all the conditions of the function. The explanation of the circulation of the blood is the demonstration of all its laws, modes, and conditions; and the molecular antecedents of it are but a small part of the explanation. The principal part relates to the molar (and not the molecular) action of the heart and other organs. The function of motion is explained, he says, 'when the movements of the living body are found to have cer-

tain molecular changes for their invariable antecedents.' Nothing of the kind. The function of bodily motion is explained when the laws, modes, and conditions of that motion are demonstrated; and molecular antecedents are but a part of these conditions. The main part of the explanation, again, deals with molar, not molecular, states of certain organs. 'The function of sensation is explained,' says Professor Huxley, 'when the molecular changes, which are the invariable antecedents of sensations, are discovered.' Not a bit of it. The function of sensation is only explained when the laws and conditions of sensation are demonstrated. And the main part of this demonstration will come from direct observation of the sensitive organism organically, and by no molecular discovery whatever. All this is precisely the materialism which I condemn; the fancying that one science can do the work of another, and that any molecular discovery can dispense with direct study of organisms in their organic, social, mental, and moral aspects. Will Professor Huxley say that the function of this Symposium is explained, when we have chemically analysed the solids and liquids which are now effecting molecular change in our respective digestive apparatus? If so, let us ask the butler if he cannot produce us a less heady and more mellow vintage. What irritated *viscus* is responsible for the *Materialist in Philosophy*? We shall all philosophise aright, if our friend Tyn-dall can hit for us the exact chemical formula for our drinks.

It does not surprise me, so much as it might, to find Professor Huxley slipping into really inaccurate definitions in physiology, when I remember that hallucination of his about questions of science all becoming questions of molecular physics. The molecular facts are valuable enough; but we are getting molecular-mad, if we forget that molecular facts have only a special part in physiology, and hardly any part at all in sociology, history, morals, and politics; though I quite agree that there is no single fact in social, moral, or mental philosophy, that has not its correspondence in some molecular fact, if we only could know it. All human things undoubtedly depend on, and are certainly connected with, the

general laws of the solar system. And to say that questions of human organisms, much less of human society, tend to become questions of molecular physics, is exactly the kind of confusion it would be, if I said that questions of history tend to become questions of astronomy, and that the more refined calculations of planetary movements in the future will explain to us the causes of the English Rebellion and the French Revolution.

There is an odd instance of this confusion of thought at the close of Professor Huxley's paper, which (still more oddly Lord Blachford, who is so strict in his logic, cites with approval. 'Has a stone a future life,' says Professor Huxley, 'because the wavelets it may cause in the sea persist through space and time?' Well! has a stone a *life* at all? because if it has no present life, I cannot see why it should have a future life. How is any reasoning about the inorganic world to help us here in reasoning about the organic world? Professor Huxley and Lord Blachford might as well ask if a stone is capable of civilisation because I said that man was. I think that man is wholly different from a stone; and from a fiddle; and even from a dog; and that to say that a man cannot exert any influence on other men after his death, because a dog cannot, or because a fiddle, or because a stone cannot, may be to reproduce with rather needless affectation the verbal quibbles and pitfalls which Socrates and the sophists prepared for each other in some wordy 'symposium of old.

Lastly, Professor Huxley seems to think that he has disposed of me altogether, so soon as he can point to a sympathy between theologians and myself. I trust there is great affinity and great sympathy between us; and pray let him not think that I am in the least ashamed of that common ground. Positivism has quite as much sympathy with the genuine theologian as it has with the scientific specialist. The former may be working on a wrong intellectual basis, and often it may be by most perverted methods; but in the best types, he has a high social aim and a great moral cause to maintain amongst men. The latter is usually right in his intellectual basis as far as it goes; but it does not go very

far, and in the great moral cause of the spiritual destinies of men he is often content with utter indifference and simple nihilism. Mere raving at priestcraft, and beadles, and outward investments, is indeed a poor solution of the mighty problems of the human soul and of social organisation. And the instinct of the mass of mankind will long reject a biology which has nothing for these but a sneer. It will not do for Professor Huxley to say that he is only a poor biologist and careth for none of these things. His biology, however, 'includes man and all his ways and works.' Besides, he is a leader in Israel; he has preached an entire volume of Lay Sermons; and he has waged many a war with theologians and philosophers on religious and philosophic problems. What, if I may ask him, is his own religion and his own philosophy? He says that he knows no scientific men who 'neglect all philosophical and religious synthesis.' In that he is fortunate in his circle of acquaintance. But 'since he is so earnest in asking me questions, let me ask him to tell the world what is his own synthesis of philosophy, what is his own idea of religion? He can laugh at the worship of Priests and Positivists: whom, or what, does he worship? If he dislikes the word Soul, does he think man has anything that can be called a spiritual nature? If he derides my idea of a Future life, does he think that there is anything which can be said of a man, when his carcase is laid beneath the sod, beyond a simple final *Vale*?

P.S.—And now space fails me to reply to the appeals of so many critics. I cannot enter with Mr. Roden Noel on that great question of the materialisation of the spirits of the dead; I know not whether we shall be 'made one with the great Elohim, or angels of Nature, or if we shall grovel in dead material bodily life.' I know nothing of this high matter: I do not comprehend this language. Nor can I add anything to what I have said on that sense of personality which Lord Selborne and Canon Barry so eloquently press on me. To me that sense of personality is a thing of somewhat slow growth, resulting from our entire nervous organisation and our composite mental constitution. It seems to

me that we can often trace it building up and trace it again decaying away. We feel ourselves to be *men*, because we have human bodies and human minds. Is that not enough? Has the baby of an hour this sense of personality? Are you sure that a dog or an elephant has not got it? Then has the baby no soul? has the dog a soul? Do you know more of your neighbor, apart from inference, than you know of the dog? Again, I cannot enter upon Mr. Greg's beautiful reflections, save to point out how largely he supports me. He shows, I think with masterly logic, how difficult it is to fit this new notion of a glorified activity on to the old orthodoxy of beatific ecstasy. Canon Barry reminds us how this orthodoxy involved the resurrection of the body, and the same difficulty has driven Mr. Roden Noel to suggest that the material world itself may be the *débris* of the just made perfect. But Dr. Ward, as might be expected, falls back on the beatific ecstasy as conceived by the mystics of the thirteenth century. No word here about moral activity and the social converse, as in the Elysian fields, imagined by philosophers of less orthodox severity.

One word more. If my language has given any believer pain, I regret it sin-

cerely. It may have been somewhat obscure, since it has been so widely arraigned, and I think misconceived. My position is this. The idea of a glorified energy in an ampler life is an idea utterly incompatible with exact thought, one which evaporates in contradictions, in phrases which when pressed have no meaning. The idea of beatific ecstasy is the old and orthodox idea; it does not involve so many contradictions as the former idea, but then it does not satisfy our moral judgment. I say plainly that the hope of such an infinite ecstasy is an inane and unworthy crown of a human life. And when Dr. Ward assures me that it is merely the prolongation of the saintly life, then I say the saintly life is an inane and unworthy life. The words I used about the 'selfish' views of futurity, I applied only to those who say they care for nothing but personal enjoyment, and to those whose only aim is 'to save their own souls.' Mr. Baldwin Brown has nobly condemned this creed in words far stronger than mine. And here let us close with the reflection that the language of controversy must always be held to apply not to the character of our opponents, but to the logical consequences of their doctrines, if uncorrected and if forced to their extreme.—*The Nineteenth Century*.

THE MOONS OF MARS.

ONLY a few months ago we took occasion to consider the planet Mars, with special reference to the question whether it is at present, like our earth, the abode of living creatures, and, in particular, of intelligent beings. The circumstance that Mars was about to make a nearer approach to our earth than he has made for fifteen years, or will again make for forty-seven, seemed to render the occasion a fitting one for discussing questions of interest relating to the planet. Apart, indeed, from the interest with which intelligent persons regard the other worlds of our solar system, it has always seemed to us that exact science, nay, even what may be called professional science, gains, when attention is specially directed to approaching celestial phenomena. For it affords no small encouragement to the systematic observer of the heavens to

know that any discoveries he may make during some favorable presentation of a celestial body, will attract the attention they deserve. The experience of the last few years has shown that observations far more interesting and even valuable may be expected under such circumstances, than when the observer has reason to believe that only the routine work of the observatory—work bearing no closer relation to the true science of astronomy than land-surveying bears to geology—need be attended to. Certainly we may congratulate science that on this special occasion, for the first time in the history of astronomy, a great public observatory has obtained results such as heretofore only so-called amateur astronomers—the Herschels, for example, Lassell, Rosse, and so forth—have achieved. Taking advantage of the near approach

of the Planet of War, and of the exceptionally favorable conditions under which it could be observed in their latitude, the observers who have under their especial charge the great telescope of the Washington Observatory have scrutinised with special care the neighborhood of the planet which till lately was called "moonless Mars;" and their skill and watchfulness have been rewarded by the discovery of two moons attending on that planet.

There are several circumstances which render the discovery of these moons in the first place, and in the second the existence of such bodies as attendants on the small planet Mars, exceedingly interesting. These we propose briefly to indicate.

Galileo, after he had completed his largest telescope late in 1609, had to wait for nearly a year before he had a favorable opportunity for studying Mars. Thus he had already discovered the moons of Jupiter and the varying phases of Venus before he could study a planet from which he must have expected even more interesting results. For on the one hand Mars is seen under much more favorable conditions than Venus, and on the other it approaches us much more closely than Jupiter. In the mean time, Kepler had hazarded the prediction that Mars has two moons—a suggestion which, in the light of the recent discovery, may be called, like "the Pogrom statter in marble," "a pre-diction, cruel smart." Galileo saw no Martian moons, however, and could, indeed, barely recognise the gibbosity of Mars. From what is now known, indeed, we perceive that one might as hopefully try to read a newspaper at the Faulhorn from the slopes of the Jungfrau, as attempt with such a telescope as Galileo's to detect the minute companions of the War Planet.

Telescope after telescope was thereafter turned on Mars, until the great four-feet mirrors of Sir W. Herschel and Mr. Lassell, and even the mightier six-feet mirror of Parsonstown, had taken part in the survey of the planet and its neighborhood. But no satellites were discovered; insomuch that when Tennyson (in the first edition only of his poems) sang of "the snowy poles of moonless Mars," few astronomers would have

hesitated to admit that the description was a tolerably safe one.

There were, however, some who still adhered to the view which Kepler had propounded in 1610. Thus the late Admiral Smyth, after describing the appearance which our earth and her companion moon must present to the inhabitants of Mars (if inhabitants he has), says: "This appearance is not reciprocated; for though it is not at all improbable that Mars may have a satellite revolving around him, it is probably very small, and close to his disc, so that it has hitherto escaped our best telescopes; yet, being farther from the sun than the earth is, Mars—if at all habitable—would seem to stand even more in need of a luminous auxiliary."

This idea, in fact, that planets require more moons the farther they lie from the sun, and not only so, but that their requirements in this respect have been attended to, and each planet carefully fitted out with a suitable number of attendants, is one which has found special favor with many believers in other worlds than ours. Whewell, for instance, who, although in his anonymously-written "Plurality of Worlds" he appeared as an opponent of the theory of other worlds, had earlier, in his less known "Bridgewater Treatise," expressed opinions strongly favoring that theory, reasons as follows for the belief that satellites were specially made to bless the planets with their useful light: "Turning our attention to the satellites of the other planets of our system, there is one fact which immediately arrests our attention—the number of such attendant bodies appears to increase as we proceed to planets farther and farther from the sun. Such at least is the general rule. Mercury and Venus, the planets nearest the sun, have no such attendants. The earth has one. Mars, indeed, who is still farther removed, has none; nor have the minor planets, Juno, Vesta, Ceres, and Pallas" (when he wrote these only were known); "so that the rule is only approximately verified. But Jupiter, who is at five times the earth's distance, has four satellites; and Saturn, who is again at a distance nearly twice as great, has seven, besides that most extraordinary phenomenon, his ring

(which for purposes of illumination is equivalent to many thousand satellites). Of Uranus it is difficult to speak, for his great distance renders it almost impossible to observe the smaller circumstances of his condition. It does not appear at all probable that he has a ring like Saturn; but he has at least five satellites which are visible to us" (four only are now recognised) "at the enormous distance of 900 millions of miles; and we believe that the astronomer will hardly deny that he" (Uranus, not the astronomer) "may possibly have thousands of smaller ones circulating about him. But leaving conjecture, and taking only the ascertained cases of Venus, the earth, Jupiter, and Saturn, we conceive that a person of common understanding will be strongly impressed with the persuasion that the satellites are placed in the system with a view to compensate for the diminished light of the sun at greater distances," whence we may infer that in subsequently rejecting this opinion, in his 'Plurality of Worlds,' Whewell showed himself a person of uncommon understanding.

According to Whewell's earlier way of viewing the satellites, however, the fact that Mars seemed to have no satellites was to some degree a difficulty, but not an insuperable one. "The smaller planets, Juno, Vesta, Ceres, and Pallas," he said, "differ from the rest in so many ways, and suggest so many conjectures of reasons for such differences, that we should almost expect to find them exceptions to such a rule. Mars is a more obvious exception. Some persons might conjecture from this case, that the arrangement itself, like other useful arrangements, has been brought about by some wider law, which we have not yet detected. But whether or not we entertain such a guess (it can be nothing more), we see in other parts of creation so many examples of apparent exceptions to rules, which are afterwards found to be capable of explanation, or to be provided for by particular contrivances, that no one, familiar with such contemplations, will by one anomaly be driven from the persuasion that the end which the arrangements of the satellites seem suited to answer is really one of the ends of their creation."

According to the method of viewing such matters which is now generally in favor among men of science, the considerations urged by Whewell will not be regarded as of any weight. They would not be so regarded even if the satellites of Jupiter, Saturn, and Uranus, or the rings which surround Saturn, really subserved the purpose which Whewell, Brewster, Chalmers, Dick, Lardner, and others have so complacently dwelt upon. But in reality, apart from the evidence tending to show that none of these planets can at present be inhabited, it is absolutely certain that moonlight on Jupiter and Saturn must be far inferior to moonlight on our earth despite the greater number of moons, while that received by Uranus from his four moons must be scarce superior to the light we receive from Venus, Jupiter, Mars, and Saturn, so faintly are the Uranian satellites illuminated by a sun nineteen times more remote than the sun we see. As for the rings of Saturn, they act far more effectively to deprive the planet of sunlight than to illuminate the Saturnian nights. Despite the efforts made by Lardner to defend these appendages from the reflections cast upon them in this respect by Sir J. Herschel, it may be mathematically demonstrated (and has been by the present writer) that the rings cast wide zones of the planet—zones many times exceeding the whole surface of our earth—into total eclipse lasting several years in succession. Even were it otherwise, however, no one, familiar with the evidence which nature multiplies around us, would have been disposed to argue, from the presumed fitness of the Jovian and Saturnian arrangements as to satellites, that Mars has moons. If there is a meaning in the arrangements actually observed which should have led astronomers to believe in the existence of Martian satellites—a view which certainly the discovery of such satellites goes far to confirm—the meaning is one which the laws of physics alone can be expected to interpret.

That Mars should have definitely come to be regarded by nearly all astronomers as without satellites will readily be understood if we consider the nature of the evidence which had been obtained. When Jupiter is at his farthest

from us, but in opposition* (that is, on the side remote from the sun), all four of his satellites, the least of which is rather less than our own moon, are quite easily seen in the smallest telescopes ever used in astronomical observation. Certainly they can then be all seen with a good telescope *one inch* in aperture. At such times Jupiter lies at a distance of about 410 millions of miles from us. Now Mars, when he makes his nearest opposition approaches (as for instance in the present autumn), lies at a distance from us of about 35 millions of miles, or less than Jupiter's in the proportion of about seven to eighty-two, or at not much more than one-twelfth of Jupiter's distance. This would cause a self-luminous body to appear about 140 times brighter at Mars's distance than at Jupiter's. But satellites are not self-luminous. Their brightness depends on sunlight, and the nearer they are to the sun the more brightly they necessarily shine. Mars is illuminated, when nearest to the sun, with an amount of sunlight exceeding that which illumines Jupiter when farthest from the sun (these being the cases we are dealing with) in a proportion of more than fifteen to one. So that a satellite near Mars, as large as the least satellite of Jupiter, would shine fifteen times 140 times more brightly, or, in round numbers, fully 2,000 times more brightly, than one of those bodies which the observer can readily see with a telescope only one inch in aperture. But most certainly it is not assuming too much to claim for the most powerful telescopes with which Mars's neighborhood had been searched for satellites an illuminating power exceeding that of so minute a telescope 400 times. This would have made such a moon as we have imagined appear at least 800,000 times brighter than the least of Jupiter's moons actually appears in a telescope one inch in aperture. If, then, instead of being so large as this—that is, 2,000 miles or so

in diameter—a moon of Mars had a diameter so much less that the disc were reduced to one-800,000th part of such a moon's disc, it would be as readily visible with one of the very powerful telescopes above mentioned as is Jupiter's least moon with a one-inch telescope. This would be the case if the diameter were reduced to one-895th part (for 895 times 895 is very nearly equal to 800,000). So that, were it not for one consideration now to be mentioned, it would have seemed that astronomers might safely have assumed that Mars has not a moon exceeding $2\frac{1}{4}$ miles in diameter. The consideration in question is this: a satellite might travel very near to Mars, so that it would always be more or less involved in the luminosity surrounding his disc. The best telescope cannot get rid of this luminosity; for, in fact, it is not an optical but a real light. It is, in fact, our own air, which is lit up by the planet's rays for some distance all round. Now a small satellite amidst this light, even though the planet itself might be kept out of view, would be much less readily viewed than a satellite seen like one of Jupiter's at a great distance from its primary. Yet, as it is known that Jupiter's satellites can be traced right up to the edge of the planet, we do not think so much importance should be attributed to this circumstance as is sometimes done. It should certainly be possible to see a Martian satellite two diameters of the planet, let us say, from the edge, if it shine with twice as much light as would make it visible on a perfectly dark sky. Let us, however, say that the satellite ought to be four times instead of twice as bright. Then the diameter, instead of being $2\frac{1}{4}$ miles in order that a satellite close to Mars should just be visible in a very powerful telescope, should be $4\frac{1}{2}$ miles. Certainly we should expect that a satellite five miles in diameter would have been long since revealed under the searching scrutiny to which the neighborhood of Mars has again and again been subjected.

Now it could not but be admitted that a moon five miles or even ten miles in diameter would differ so much from any known moon that the difference must be regarded as rather one of kind than one of degree. No such body had as yet

* The reader must not understand us here to mean that it is when in opposition that Jupiter is farthest from us, for the reverse is the case. It is at his successive opposition that he makes his nearest approach to the earth; but he is nearer at some oppositions than at others, and we are speaking above of those oppositions when his distance is greatest.

been heard of—at least no such body travelling as an independent moon. A hundred years ago, indeed, men would hardly have been prepared to admit the possibility of a body whose existence, if demonstrated, would have overthrown all their ideas as to the structure of the solar system. They knew of suns, of planets attending on one sun, and of moons attending on several planets, and they knew also of a ring-system accompanying one planet in its course round the sun. Thus they were prepared to recognise new suns, new planets, new moons, and new rings. Sir W. Herschel was nightly engaged in observing hundreds of before unknown suns. He discovered one new planet (Uranus), several new moons attending on Uranus and Saturn, and, as he thought, a pair of new rings attending on Uranus. But that any of the primary planets should be attended by a moon so small as not to admit of being fairly classed with the other known moons of the solar system would have seemed to most of the astronomers of the last century an idea as inadmissible as that an orbital region of the solar system should be occupied by a number of very small planets instead of a single primary planet. In recent times, however, men have become accustomed to recognise how small is our right to assert definitely the characteristics of suns, planets, moons, rings, and other such orders of bodies in the universe. We have found that, besides such suns as our own, there are some so much larger that they must be regarded as forming a distinct class of giant suns; while others, again, are separated in kind, not merely in degree, from such suns as ours, because of their relative minuteness. We have learned in like manner to distinguish the planets into classes, recognising in the giant planets Jupiter, Saturn, Uranus, and Neptune a family altogether distinct from that of the terrestrial planets, the earth and Venus, Mars and Mercury; while among the minor planets which throng in hundreds, perhaps in thousands, the orbit region between Mars and Jupiter we find another family separated from the terrestrial planets as definitely by their extreme minuteness as are the giant planets by their enormous dimensions. Among ring-systems, again, we had learned to recognise many varieties. In

the rings of Saturn we have a system formed of multitudes of tiny moons travelling so closely together as to appear from our distant station as continuous rings. In the ring of minor planets we have multitudes of tiny planets; but they are so widely strewn that each must be separately sought for with the telescope and no signs of the ring as a whole can be seen in the heavens. Then we have the rings of meteors, oval for the most part in figure and often curiously eccentric as well as extended; sometimes complete rings, or nearly so, like those which produce the August displays of shooting-stars; sometimes incomplete, and at others known only by "the gem of the ring," one rich region in the entire circuit.

But even with our actual knowledge of the diversity existing among the orders of bodies constituting the material universe, we were scarcely prepared to hear of moons like those of Mars. It is not the smallness of these bodies which is so surprising. There would have been nothing very remarkable in the existence of even smaller moons attending on any of the minor planets. Nor is it merely the enormous difference of dimensions between the planet and its moons; for in the case of Jupiter we have a planet whose moons bear a very much smaller proportion to the mass of their primary than our moon bears to the earth; and, though the disproportion is nothing nearly so great as that between Mars and his moons, it would still prepare us for recognizing any degree almost of disproportion between a planet and its satellite. The strange circumstance in the actual case lies in the fact that Mars belongs to a known family of planets, viz., the terrestrial family of which our earth is a leading member; and hitherto it had appeared as if all moons attending on the planets of one and the same class belonged themselves to one and the same class. The range of diversity of magnitude among the moons, for instance, attending on the giant planets, though considerable, is not such as to prevent us from regarding these moons as all of one class. Then, too, it seemed from the fact that our own moon is of the same class as those others, that, speaking generally, diversity of size is not to be

looked for to the same degree among moons even attending on planets of different classes, as among planets or among suns. Certainly there was nothing in the past experience of astronomers to suggest that a planet like Mars, belonging to the same class as our earth, might have a moon or moons belonging to an altogether inferior class.

It was, then, with a sense of astonishment, which would have been mingled with doubt but for the altogether unexceptionable source whence the information came, that astronomers heard of the discovery of two Martian satellites with the great telescope of the Washington Observatory.

The discoverer of the satellites, and the telescope with which they were discovered, both promised well for the truth of what some regarded at first as a mere report.

Professor Asaph Hall, who has long been known as one of that band of skilful and original observers of which American astronomy has just reason to be proud, had during the last few years made many observations showing that, besides scientific skill, he possesses a keen eye. Some of his observations were such as must have taxed even the power of the noble instrument which has lately been erected at Washington. For instance, the faintest of Saturn's satellites, the coy Hyperion, though discovered nearly thirty years ago, had been very little observed, insomuch that the true path of this small moon (a perfect giant, however, compared with the Martian satellites) had not been determined. In 1875, Professor Hall undertook the difficult task of closely observing this body; and now, at last, astronomers at least know where, at any hour, on any night, Hyperion is to be looked for, though the search would be to very little purpose with any save two or three of the most powerful telescopes in existence. Again, amongst other of his observations which required keen vision and patient watchfulness, must be cited the re-determination of the period in which the planet Saturn turns on its axis. This he accomplished in the year 1876. But, undoubtedly, the detection of the Martian satellites must be regarded as a far more noteworthy achievement than either of these.

The telescope which Professor Hall has been privileged to use may fairly be described as the finest refractor yet mounted. Newall, in England, has a telescope 25 inches in aperture, which, until the Washington telescope had been made, was the largest refractor in existence. The Washington instrument has an aperture of 26 inches, making its illuminating power between one-twelfth and one-thirteenth greater. But this telescope is also remarkable for the skill with which it has been made by Messrs. Alvan Clark & Sons, of Cambridgeport, Mass. We know few more interesting histories in scientific biography than that which records the progress of Alvan Clark's labors in the construction of object-glasses—from the first small one which he made (which fell from his hands and was destroyed within a few moments of its completion) to the noble telescope which was mounted at Washington five years ago, after meeting satisfactorily all the tests applied to it by Mr. Clark and his two sons, who inherit his energy and skill. But in this place we must be content with noting that all who have ever used object-glasses constructed by the Clarks have found their optical performance all but perfect; in fact, as nearly perfect as can be obtained from lenses made of a substance which cannot possibly be altogether free from defects, however carefully prepared. Those observers at Washington who have used the great telescope systematically, agree in regarding with peculiar favor the performance of the great compound lens which forms what is technically called its object-glass.

When, then, news came that Professor Hall, using this powerful instrument, had discovered two satellites of Mars, even those who at first supposed the news to be a mere report, felt that the observer and the telescope were alike worthy of being credited with a success of the kind.

But in reality there was no room for doubt from the beginning. The news had been telegraphed to Leverrier by the Smithsonian Institution of Washington, and by Leverrier announced to English and Continental observers. It was known that an arrangement had been made by the oceanic telegraph companies to forward such intelligence, and that the news must of necessity have come

from the source indicated. So that several days or so before details of the discovery reached Europe, the present writer communicated it to the *Times* (in a letter which appeared on Saturday, August 25), or less than a week after the second moon had been detected, as a discovery not open to doubt or question.

Within two days from this, or on August 27, the brothers Henry were able to recognise the outer satellite with the fine telescope of the Paris Observatory; but it was very faint, and could only be seen when the planet was screened from view. In the mean time, however, two other telescopes in America had been used to bring these tiny bodies into view. One of these was the fine 15-inch Merz refractor* of the Harvard Observatory, Cambridge, Mass., celebrated in the history of astronomy as that wherewith Saturn's satellite Hyperion had been detected in 1848. The other was an instrument as large, and doubtless as powerful, as the Washington telescope itself. It will have been noticed, perhaps, that, in speaking of the latter above, we said that it is the finest refractor yet mounted, not the finest yet made. Messrs. Alvan Clark have made a companion instrument for the observatory of Mr. McCormick, of Chicago, one of those munificent patrons of science of whom (of late, in particular) America has just reason to be proud. The instrument has not yet left Messrs. Clark's factory, and cannot be said to have been yet (properly speaking) mounted. But the Clarks managed to get it turned upon Mars, and were able to see the Martian satellites. There is another very fine telescope, by the way, also made by Messrs. Clark & Sons, which is now erected at Chicago, where one of the most eminent observers of double stars, Mr. S. W. Burnham, has long pursued his labors. Its object-glass is 18 inches in aperture; and we should have expected that, with this aperture and Mr. Burnham's keen vision, the Martian satellites would have been brought into view. We do not hear, however, of their being seen at Chicago. Perhaps unfavorable

weather prevented any observations being made there.

The first news was expressed in telegraph-language, and was imperfect. It ran thus: "Two satellites of Mars discovered by Hall at Washington. First elongation west August 18, eleven hours, Washington time. Distance eighty seconds. Period, thirty hours. Distance of second, fifty seconds." This being interpreted (or rather, the latter part being interpreted), means that the outermost, in its circuit around Mars, had reached its greatest apparent westerly range at 11 P.M., Washington time, August 18, or about 4 A.M., August 19, Greenwich time (which Astronomers would call August 18, sixteen hours Greenwich time), and that at this time its seeming distance from the centre of Mars was about one twenty-fourth part of the apparent diameter of the moon. As to the other satellite the news did not convey much information. It implied that the distance was five-eighths that of the outer moon; but whether that was the greatest distance, or the distance at the hour named, there was nothing to show. As it turned out, there was a mistake about this moon, for the greatest range of the moon, east and west of Mars, amounted only to about three-fifths of the distance named.

In the circular issued by the Secretary of the United States Navy (the Hon. R. W. Thompson), dated August 21, 1877, a copy of which reached the present writer on September 3, fuller and more correct details are given, in a form, however, which would be quite unsuited to these pages. We will endeavor to present their meaning correctly, but without technical expressions.

The outer satellite travels at a distance from Mars's centre, such that, when the planet is at its nearest, the extreme apparent span of the satellite's path would be about one-eleventh part of the moon's apparent diameter. In actual length this range is about 28,600 miles, half of which represents the distance from the centre of the planet—about 14,300 miles. As Mars has a diameter of about 4,600 miles, the distance of the satellite from his surface is about 12,000 miles, or, roughly, about one-twentieth of the distance which separates the moon from the earth. This other moon trav-

* We use the technical term "refractor" as the only convenient way of describing a telescope with an object-glass, as distinguished from a telescope with a mirror or speculum, which is called a "reflector."

els round Mars in thirty hours fourteen minutes, the possible error in this determination at present being about two minutes. We have seen that it must be a very small moon. The present writer, in an article in the *Spectator* which appeared before the circular above mentioned had reached Europe, had indicated ten miles as the greatest diameter which could possibly be assigned to this body. Let us hear what Professor Newcomb, the eminent mathematician who presides over the astronomical department of the Washington Observatory, who has himself seen the satellite, has to say on this point. Writing to the *New York Tribune* he remarks that "the first question which will naturally arise is, Why have these objects not been seen before? The answer is, that Mars is now nearer to the earth than he has been at any time since 1845, when the great telescopes of the present day had hardly begun to be known. In 1862, when Mars was again pretty near to the earth, we may suppose that they were not looked for with the two or three telescopes which alone would have shown them. In 1875 Mars was too far south of the equator to be advantageously observed in high northern latitudes. The present opportunity of observing the planet is about the best that could possibly occur. At the next opposition, in October, 1879, there is hope that the satellites may again be observed with the great telescope at Washington; but Professor Newcomb thinks that during the following ten years, when, owing to the great eccentricity of the orbit of Mars, he will be much farther from the earth at opposition, the satellites may be invisible with all the telescopes of the world. In the present year it is hardly likely that they will be visible after October. The satellites may be considered as by far the smallest heavenly bodies yet known. It is hardly possible to make anything like a numerical estimate of their diameters, because they are seen in the telescope only as faint points of light. But one might safely agree to ride round one of them in a railway car between two successive meals, or to walk round in easy stages during a very brief vacation. In fact, supposing the surface of the outer one to have the same reflecting power as that of Mars, its diameter

cannot be much more than ten miles, and may be less. Altogether these objects must be regarded as among the most remarkable members of the solar system."

Assigning to this satellite a diameter of ten miles—which we ourselves, for the reasons above indicated, consider too large—it would appear, at a distance of 12,000 miles, with a diameter equal to about the tenth of our moon's, and therefore with a disc equal to about a hundredth of hers in apparent area. But being less brightly illuminated it would shine with less than the hundredth part of her light. Mars receives from the sun (and therefore his moons receive) between one-half and one-third as much light as our earth and moon receive, about half when Mars is at his nearest to the sun, and about one-third when he is at his farthest from the sun. Thus the light given by the farther of his two moons varies from one two-hundredth to one three-hundredth part of our moon's. This part, then, of the Martian moonlight is but small in amount, and certainly cannot go far to compensate the Martians (as compared with us Terrestrials) for their greater distance from the sun.

Of course this moon passes through all the phases which we recognise in the case of our own moon. It travels very rapidly among the constellations of the Martian heavens, which are exactly the same in all respects as those we see. In very little over thirty hours it traverses the entire circuit of the heavens; or over what would correspond to one of our zodiacal signs in two and a half hours: whereas our own moon takes more than two and a quarter days traversing one of these signs. Its rate of motion may be best inferred, however, from the statement that, if our moon travelled as fast, she would traverse a distance equal to her own diameter in a little over two and a half minutes, so that her motion among the stars would be quite obvious to ordinary vision. Perhaps the reader may be interested to know which constellations are traversed by this Martian moon in the course of its circuit of the heavens. The zodiac of Mars, or the pathway of the sun and planets, is nearly the same as ours; but her outer moon, instead of travelling, as ours does, within the zodi-

ac, and indeed in a course nearly approaching the sun's, ranges far to the north and south of the solar pathway in each circuit. Its path crosses the ecliptic (passing from the southern to the northern side) at a point between the two stars which mark the tips of the Bull's horns. It runs thence over a rather barren region north of the twin stars Castor and Pollux, over the Lesser Lion, through the Hair of Berenice, where it attains its greatest northerly distance from the sun's track. Thence it passes onwards across the feet of the Herdsman, the body of the Serpent, and the feet of the Serpent-Holder, crossing the sun's track near the right foot of this worthy. On its track, now south of the sun's, it passes over the Bow of the Archer, and thence over his hind feet (the gentleman is of the Centaur persuasion), over the head of the Crane, and along the Southern Fish (not the southernmost of the Tied Fishes belonging to the zodiac, but the single fish into whose mouth the Water-Bearer pours a stream of water); ranging very closely past the bright star Fomalhaut (which it must sometimes hide, just as our own moon sometimes hides the bright Antares and Aldebaran). Thence the Martian moon passes athwart the Sea Monster and the River Eridanus, over the Bull, passing very close indeed to Aldebaran (which it must sometimes hide from view), to its starting-place between the horns of the Bull. The circuit we have just described is very nearly the celestial equator of the Martian heavens. (The north pole of the Martians lies near the Tail of the Swan, and the bright star Arided of this constellation must be their north polar star; the southern pole-star for the Martians is the star Alpha of the Peacock: neither this star, nor any part of the constellation, is visible in our northern latitudes.)

One peculiar effect of this outer moon's rapid motion among the stars is that it moves very slowly in the Martian skies. The whole of the heavenly sphere, as seen from Mars, is of course carried from east to west just as with us, except that, instead of completing a circuit in twenty-four hours, it requires twenty-four hours thirty-seven minutes twenty-two seconds and seven-tenths, that being the length of the Martian day. Their

outer moon shares this motion with the stars; but as it is itself travelling all the time from west to east among the stars, going once round in thirty hours fourteen minutes, or travelling nearly as fast *this way* as it is carried *the other*, it appears to move very slowly with reference to the horizon. Suppose it, for instance, rising in the east in company with Fomalhaut. The stellar heavens are carried round, and Fomalhaut passes over to the west in twelve hours nineteen minutes. But the moon has in this time moved away eastwards from the star by nearly two-fifths of a complete circuit, or four-fifths of the range from west to east. Instead, therefore, of being on the western horizon with the star, the moon has passed only one-fifth of the way from the eastern horizon. In another half-day she has travelled two-fifths of the way, and so on. So that, roughly, this moon occupies five half-days, or about sixty hours, in passing from the eastern to the western horizon. She is the same length of time below the horizon. In other words, strange though it may seem, this moon, which travels round Mars, or circuits the stellar heavens, in thirty hours, only completes her circuit of the Martian skies in about 120 hours. She passes through her phases in a little over thirty hours fourteen minutes; for, supposing her to start from the sun's place on her eastward course, she gets round again to the place he had occupied among the stars in thirty hours fourteen minutes, by which time he has travelled only a very slight distance eastwards, over which she, with her rapid motion, very quickly passes. Thus while she is above the horizon, which she is for about sixty hours, she passes twice through all her phases. Imagine her, for instance, rising with the sun. With his swifter diurnal (or apparent) motion westwards he leaves her behind, and when he sets she is, precisely as in the case before-considered, only a fifth of the way above the eastern horizon and already nearly full, being nearly opposite the sun. Very soon after sunset she is full; and when the sun is about to rise in the east again she is far on the wane, being past her third quarter, for she is now but two-fifths of the way from the eastern horizon, where he is. He travels on, her disc

waning more and more, till when he overtakes her, in the mid-heavens, she is "new" in the astronomical sense; that is, invisible. He passes to the west; and when he sets she is near her first quarter, being two-fifths of the way from his place on the western horizon. She waxes till near morning time; but when the sun rises in the east she is beginning to wane, for she is now about a fifth of the way from the place opposite to him in the west. He travels on, her disc waning more and more, until about the time of sunset, when it is new moon, the sun and moon setting together.

But even more singular, though simpler, is the behavior of the second moon. We know less of the inner than of the outer moon, because it is far more difficult to see. The brothers Henry, of the Paris Observatory, who caught the outer moon, failed utterly to see the inner one. But it is known that its distance from the centre of Mars is about 5,800 miles, or from the planet's surface about 3,500 miles. This moon may have a somewhat larger diameter than the other, because its proximity to Mars would naturally make it more difficult to see, and might account for astronomers failing to perceive a moon which, at the distance of the outer, must long since have been detected. If we allow to it a diameter of fifteen miles, or about one-18,000th of our moon's, its disc at the same distance as ours would be only about one-1,100th of the disc of our moon. But that proximity to Mars which makes this moon so faint to our eyes must of course make it much larger to theirs. It so happens that this effect of proximity causes the moon to appear larger to almost one-fourth the degree in which her real surface (or disc seen at equal distance) is less than that of our moon, on the assumption we have made. Thus she has a disc, always on this assumption be it remembered, equal to about a quarter of our moon's; and being illuminated by the sun, like the other moon, with a light varying from one-half to one-third that which he pours on the earth, it follows that the light she reflects to Martians, or would reflect to them if there were any such beings, varies from one-eighth to one-twelfth of that which we receive from the full moon. The two moons together do not, under the most favorable condi-

tions, supply one-seventh of the light which the full moon gives to us.

But it is by her motions that this moon is rendered most remarkable among all the satellites of the solar system. She travels round the planet, or, as seen from the planet, she completes her circuit of the stellar heavens, in about 7 hours 38½ minutes. This is less than a third of the time in which Mars turns on his axis, or in which the stellar heavens are carried round from east to west. So that, as his nearer moon travels more than three times as fast from west to east as the heavens are carried from east to west, it follows that she has an excess of real eastwardly motion equivalent to more than twice the rate of motion of the star-sphere westwards. She moves, then, in appearance, from the western to the eastern horizon, and in less than half the time in which the stars or the sun are carried from the eastern to the western horizon, thus completing her apparent motion across the skies from west to east in about five hours. As she goes through all her phases in about seven hours thirty-nine minutes there are not so many changes in her aspect while she is above the horizon as there are in the case of the outer moon. Her strangest feature is her rapid motion eastwards, causing her to pass from the western to the eastern horizon, instead of the usual way round. Her actual motions among the stars would be very obvious to such vision as ours; for she traverses a distance equal to our moon's apparent diameter in forty seconds!

The moons of Mars have proved as communicative respecting their primary as our own moon has shown herself respecting our earth. As Newcomb well remarks, Leverrier's determination of the mass of Mars (at about one-118th part of our earth's mass) was the product of a century of observations and several years of laborious calculation by a corps of computers; whereas from the measures of the satellite on four nights only, ten minutes' computation gave a value of the planet's mass in striking agreement with Leverrier's—viz., one-113th of the earth's mass. Moreover, this value, though obtained in so short a time, is more trustworthy than Leverrier's. It amounts to a reduction of the planet's mass by one-200th part of the earth's, or

by a trifle of about thirty millions of millions of millions of tons.

We may add, in conclusion, two curious anticipations of the late discovery. One is well known—Swift's account (probably corrected in this place by Arbuthnot, for Swift was no arithmetician) of the discoveries made by the Laputan astronomers. "They have likewise discovered two lesser stars," he says, "or satellites, which revolve about Mars, whereof the innermost is distant from the centre of the primary planet exactly three of his diameters and the outermost five; the former revolves in the space of ten hours and the latter in $21\frac{1}{2}$, so that the squares of their periodical times are very nearly in the same proportion with the cubes of their distance from the centre of Mars, which evidently shows them to be governed by the same law of gravitation that influences the other

heavenly bodies." The other is from Voltaire's *Micromégas, Histoire Philosophique*. The Sirian giant, with a Saturnian friend, visited the neighborhood of Mars: "Ils côtoyèrent la planète fide Mars, qui, comme on sait, est cinq fois plus petite que notre petit globe; ils virent deux lunes qui servent à cette planète, et qui ont échappé aux regards de nos astronomes. Je sais bien que le père Castel écrira, et même assez plaisamment, contre l'existence de ces deux lunes; mais je m'en rapporte à ceux qui raisonnent par analogie. Ces bons philosophes là savent combien il serait difficile que Mars, qui est si loin du soleil, se passât à moins de deux lunes." Beyond all doubt both these pleasantries had their origin in the idea thrown out by Kepler in 1610, when Galileo announced to him the discovery of the four moons of Jupiter.*—*Cornhill Magazine*.

THE KHEDIVE'S EGYPT, AND THE ROUTE TO INDIA.

The Khedive's Egypt; or, The Old House of Bondage under New Masters. By Edwin de Leon, ex-Agent and Consul-General in Egypt. New York: Harper & Bros.

THE Khedive's Egypt has this point of resemblance to the Egypt of the Pharaohs—that the people of the soil are ground down and oppressed by cruel taskmasters now, as they were in and before the days of Moses.

What the Pyramids were to the poor Egyptian of the time of Cheops—what the treasure-cities Ramses and Pithom were to the Israelites—the Suez Canal and the other public works undertaken during his reign have been to the poor Egyptians of the Khedive Ismail who have been sacrificed by thousands on the altar of "progress" erected by their ruler.

Mr. De Leon in respect to Egypt, the character of its ruler, and the condition of its people, speaks with an authority derived from an intimate personal acquaintance of many years' duration with the country. American Consul-General at Cairo during the Crimean war, he resigned that post to throw in his fortunes with his native South at the commencement of the great American struggle. But he has ever since kept up intimate

relations with the principal public men of Egypt; and it will appear, from a perusal of the interesting pages now under remark, that although Mr. De Leon feels natural partiality for a ruler from whom during a long acquaintance he has received many marks of kindness and consideration, he does not on that account extenuate his faults, while giving him full credit for his good qualities.

"Ismail Khedive is a man of about forty-eight years of age, under the middle height, but heavily and squarely built, with broad shoulders, which, during the last year, seem to have become bowed down by the heavy burdens imposed upon him, under which he has so manfully struggled. His face is round, covered by a dark brown beard, closely clipped, and short moustache of the same color, shading a firm but sensual mouth. His complexion is dark; his features regular, heavy rather than mobile in expression. His eyes, which he keeps habitually half closed, in

* Since the above was written Mr. Wentworth Erck, of Sherrington, Bray, has announced that the outer satellite has been seen three times with his seven-inch Alvan Clark telescope. In one of these observations a small star was certainly seen; the others seem to have been real observations of the satellite. Either Newcomb must have underestimated the satellite's brightness, or else its surface is of such a nature that it varies in lustre.

Turkish fashion, sometimes closing one entirely, are dark and usually dull, but very penetrating and bright at times, when he shoots a sudden sharp glance, like a flash, at his interlocutor. His face is usually as expressionless as that of the Sphinx or the late Napoleon III., of whom, in my intercourse with the Khedive, I have been frequently reminded; for they are men much of the same stamp in character and intellect, with the same strong and the same weak characteristics doing constant battle with each other. The Khedive's voice is very characteristic—low, somewhat thick, yet emphatic, well modulated, giving meaning to the most commonplace utterances; his words accompanied by a smile of much attractiveness when he seeks to please, and his mind is at ease. But under the mask of apparent apathy or serenity, the close observer will remark that the lines across the broad brow and about the strong mouth indicate strong passions as strongly suppressed, and the cares of empire intruding ever on lighter thoughts; and judge the Khedive to be far from a happy man."

We are told that Ismail's personal amiability and humanity have been signalled by the cessation of severe punishments during his reign—with one remarkable exception of recent occurrence, which will be found related in the interesting story of the "Eastern Wolsey," as Mr. De Leon terms the late Ismail Sadyk Pasha. This man, who rose in a few years from the position of a common *fellah* to be Mouffetish or Finance Minister,

"Was reputed to understand better than any man in Egypt how to 'squeeze the *fellah*,' which meant to wring the last *pasa* out of the poor wretches by the use of the terrible *kourbash*, or hippopotamus-hide whip."

The Mouffetish appears to have exercised his power for his own profit to some purpose. At the time of his disappearance, this "mean and dirty-looking Arab of low type" possessed three palaces in Cairo, covering, with their gardens, an area as large as the Pyramids; and enjoyed or endured an establishment of thirty-six wives, regular and irregular, each of whom was waited on by six white slaves, and a retinue of black ones.

We turn from this repulsive picture to one more pleasing. If Ismail Sadyk was the bad genius of Egypt, Nubar Pasha may be termed the good genius of his adopted country. By race an Armenian, he has been known in Europe as an able Egyptian statesman for twenty years past; and he is at once the most honest

and the ablest public man that Egypt has possessed. Nubar is, however, now in disgrace and exile, because he has always been the strenuous advocate of justice for the masses, and the persistent opponent of the Khedive's costly projects. Nubar's great work has been the establishment of the mixed tribunals, which were designed at once to act as a check on the absolute power of the Khedive, and to curb the authority of the agents of foreign Governments in Egypt by depriving them of the prerogatives which they enjoyed under the old capitulations. The effect of those prerogatives was, that any civil or criminal suit in which a foreigner was defendant, could only be tried before the consular court of the nationality concerned. Under such a system, it was difficult for an Egyptian to obtain a verdict in any suit he might bring against a foreigner; equally difficult to procure the conviction of a foreigner for a criminal offence. Whereas, in all cases in which foreigners were the plaintiff, their consular agents were bound to press their claims on the local Government, which they usually did with great persistence and powerful effect. Mr. De Leon says, that on the whole, as far as his experience went, the system worked well, and insured "speedy and substantial justice to foreign residents in the absence of a better tribunal." We have no doubt that it did so; but how about the speedy and substantial justice for the natives of the soil!

The mixed tribunals, which were at once the crown and termination of Nubar's ministerial career—for their establishment by his agency was the proximate cause of his disfavor with the Khedive—are described by Mr. De Leon at length. They provide for the hearing of all international civil causes, even of those to which the Khedive is a party, before courts composed equally of the foreign and native element. This reform, although dwarfed of the fair proportions designed by Nubar, is a great step in the right direction—the small end of the wedge which the influence of England ought to drive home.

The name of Nubar Pasha was brought forward at the time of the Conference as the most eligible Christian governor for Bulgaria; but his affections, interests, and ambition are all centred in Egypt,

whither he may shortly be recalled as the only Egyptian statesman capable of steering the country through the troubled waters of the impending crisis. At the termination of Ismail's reign, moreover, Nubar is pretty certain to rule Egypt under Tewfik Pasha, Ismail's eldest son, in whose favor Nubar obtained from the Porte the alteration of the succession, which, by the original firman, was settled on the *oldest male* of Mehemet Ali's family. That oldest male, by the way, is, after the present Khedive, Halim Pasha, the youngest son of Mehemet Ali, who resides at Constantinople where he has been for some years maintained by the Porte high in favor and employment—kept as a rod in *terrorem* for the Khedive and his sons, in case they should prove refractory or stint the supplies of *baksheesh*, for which the rulers of Turkey have always had an insatiable maw. Mr. De Leon tells us that many millions of pounds have been thus annually sent from Egypt as a sop to the Turkish Cerberus. The sketch of Prince Halim, like other sketches of character in these pages, is touched with a masterly hand; and the description of his favorite sport of gazelle-hunting with hound and hawk in the Egyptian desert will well repay perusal.

To return now to the Khedive :

"His introduction of Western civilisation into Egypt; his Europeanising Cairo, the stronghold of the vanishing oriental type of city; his great public works; his greater educational plans; his filling his administrations with Europeans, and placing them at the head of all the principal bureaux; his remodelling his army under the auspices of skilled and trained army officers, invited from his Ultima Thule, America; the broad religious toleration which has made Christian churches more numerous than Moslem ones, . . . all these things are notorious, and constitute his claim to the admiration of Christendom as a wise reformer, a light newly arisen in the East."

The Khedive allows himself four wives, and is described as the model head of a family, on the oriental plan. His sons and daughters have all received the best European education; and for all these, when they marry, he has insisted on the one wife principle. The second and third sons, Hussein and Hassan Pashas, have been educated in Paris and at Oxford respectively. Hassan was present with the Abyssinian expedition,

and is now in command of the Egyptian contingent in Turkey. Of the heir apparent, Prince Tewfik, Mr. De Leon gives a very pleasing picture :—

"If I were asked to point out the model gentleman among the younger native generation at Cairo (in the higher sense of that much-abused word), I should select Prince Tewfik as one of its most superior types. . . . In the great whispering-gallery of that Court, and of the Frank community at Cairo, I have never heard a whisper breathed against his domestic virtues or private character. . . . His face, eye, and smile inspire confidence. You feel that here is a man you can trust. . . . Should it be his fate to mount the throne of Egypt, I predict that he will prove a prudent, humane, and sensible ruler, and do credit to himself and good to his people."

The present ruler of Egypt is a remarkable contrast to Eastern potentates generally, both in respect of liberality of views and of attention to business. But his reforming zeal has gone near to be his ruin as well as that of his people. Every new project, no matter how costly, which promised to increase the greatness of Egypt in however remote a future, found in him a ready listener and often a dupe. His financial troubles are due—partly to his large expenditure on the Suez Canal, partly to the ambitious engineering works he has undertaken, partly to his military expeditions, partly to the incessant cry of the daughter of the horse-leech resident at Constantinople, partly to his mania for building, partly to his magnificent ideas of hospitality. For his large expenditure on the Suez Canal, the Khedive, having parted with his original shares, has now almost nothing to show beyond the political importance conferred by that work on his country. So far as his pecuniary interests are concerned, they would be best consulted by shutting up the Canal, and thereby forcing all the trans-Egyptian traffic over the railway from Alexandria to Suez, which, along with the harbors and docks at these *termini*, are his private property.

It is barely twenty-five years since Robert Stephenson commenced the single line of railway from Alexandria to Suez. Now there are more than 1300 miles completed in Egypt proper; and the Khedive is pushing his railway and telegraph lines into the heart of Africa.

As an instance of his magnificent ideas may be cited the railway now

under construction from Cairo to Sioot in Upper Egypt; and its projected links of extension, partly by steamboat, partly by railway, to Khartoum on the White Nile, and thence to Massowah on the Red Sea. In the first place, the railway from Cairo to Sioot runs along the bank of the Nile, which river is all the way navigable by steamboats, a distance of 240 miles. The next link by steamer from Sioot to Wady Halfa, surmounting the First Cataract by a ship-incline, is 800 miles. From Wady Halfa, by railway, the line marking the chord of the loop there formed by the river to Khartoum, is about 550 miles. The last proposed link from Khartoum to the Red Sea is 550 miles more. Thus the total distance from Cairo to Massowah is 2000 miles, of which 1340 are by railway. In the opinion of the English engineer, who reports favorably on the proposed work, "the exportation of ivory and other Central African products will be increased and facilitated by such a railway; but they will sink into insignificance when compared with the grain, sugar, and cotton which will be produced and exported from the vast alluvial plains of the Soudan." The engineer then proceeds to show how this line when completed, with the addition of a ship-incline over the First Cataract, might shorten by three days the route to India—thereby, be it remarked, superseding the Suez Canal. And this line is to be constructed through a country where, by the engineer's report, "ordinary wood sleepers for railways would not last more than a few weeks," because of the ravages of the white ants, who eat all kinds of woods, even totally destroying the largest trees.

After saying that no data exist for estimating the precise amount of traffic to be expected, the engineer concludes his report as follows:—

"In the particular case of the Soudan Railway and its probable traffic, it is a fact which cannot be disputed, that the extent of land near its southern terminus, or within reach of it by navigable waters, or land carriage, which is capable of producing the finest crops of cotton, grain, and sugar, is practically unlimited; and that during the time requisite for the construction of the railway, such area may be brought into cultivation as will furnish immediate and considerable traffic. The vast quantities of timber of various kinds which will become cheaply accessible to the proposed rail-

way, will supply fuel to the locomotives for a long period of time, and one of the most important items in the working expenses of the railway will thereby be largely reduced. Assuming the working expenses of the Soudan Railway to be sixty per cent of the gross receipts (which is seven per cent higher than the average working expenses of all the Indian railways), it can scarcely be doubted that the traffic from the local and through sources enumerated will yield a satisfactory return upon the small cost of the proposed railway."

Thus it appears that the trade which is to pay dividends on the outlay must principally come from one extremity of the line in Central Africa, and has first to be created! The prosecution of this wild scheme has, however, been indefinitely postponed by the financial embarrassments of the Khedive, who would of course have been obliged to provide every *para* for its construction.

Under the Khedive's mania for building, Old Cairo—so dear to the traveller on account of its high and narrow streets, its four-storeyed houses, its jutting latticed windows, its jostling crowds of people and donkeys in every variety of costume and trappings, its dirt, and its picturesqueness—is fast disappearing, and giving place to an Eastern Paris. Mr. De Leon thus laments the transformation of the Ezbekieh:—

"Where once waved the branches of the stately sycamores planted by Mehemet Ali, are now to be seen only solid blocks of stone houses, with arcades in imitation of the Rue de Rivoli. . . . But the vanished Ezbekieh of twelve years ago is not the only lost vision for which the returning pilgrim strains his wandering eyes. . . . As he was wont to sit under the stately sycamores of the Ezbekieh, there used at eventide to prance gaily by a cavalcade of gay and gallant-looking Eastern cavaliers, splendidly habited in oriental costume, mounted on Arab steeds of great beauty and price, whose crimson-velvet Turkish saddles were stiff with cloth-of-gold, and whose silken bridle-reins were studded with precious stones.

"Preceded by the running Berbersycc, in his picturesque costume of white shirt, crimson sash or belt, and bare legs of ebony, and attended at the stirrup by pipe-bearer, *nargileh* in hand, whose long flexible tube was often in the hand of the rider, these proud-looking beys and pachas used to file slowly by, looking neither to the right nor the left, to the admiration of the motley crowd ever circulating about or squatting under the trees of the Ezbekieh.

"Then, also, ambling past on their sleek donkeys—huge bundles of black silk like unto balloons, and with impervious veils, through which only two bright eyes were perceptible,

escorted by the jealous eunuchs—could be seen in part the ladies of the harem, disdainful of side-saddles, and riding astride like men, as a yellow shoe perceptible on each side of the donkey conclusively proved."

The Khedive's mania for building has not been limited to the creation of new quarters in Cairo out of the ruins of the old city. This work, like some of his other improvements, will doubtless be remunerative in time. The mistake he has made in these cases is simply that of going too fast. But the same excuse cannot be pleaded for his absurdly extravagant outlay on new palaces,—and for his building of opera and play houses, which his revenues must afterwards support.

In his chapter on Egyptian finance, Mr. De Leon makes out as good a case as possible, and with much show of reason, in favor of Ismail Pasha, contending that, of the large sum of 100 millions sterling debited to Egypt by foreign accountants, not one-half has ever been touched by that prince; and that, taking into account the sums he has repaid, the outside loss to the foreign investor, supposing the Egyptian Government absolutely bankrupt, excluding the funded loans and floating debt, would not exceed from 15 to 20 millions.

But Mr. De Leon's truest sympathies are with the Khedive's patient, submissive, long-suffering drudges, the *fellaheen*. An enterprising Yankee was once asked how his countrymen would deal with the French Canadian element if Canada should ever join the United States. "I guess, sir, we should improve them off the face of the earth," was the reply. Well, the poor Egyptians are literally being improved off the face of the earth. Their ruler, though, as we are told, naturally kind-hearted, has not been able to resist the temptations of absolute power. His great public works; his new quarters, palaces, and opera-houses; the revenues he extracts from his private property,—are all built up of the muscle and cemented with the blood and tears of the Egyptian bondsmen, whose wrongs cry as loudly to heaven now in the nineteenth century as they did in the times of the Pharaohs.

The people of England trouble themselves little about Egypt, except as a convenient means of communication between England and India. But the se-

curity of that communication, and consequently their own interests, are intimately bound up with the good government of Egypt. The English people little dream at what a fearful cost of suffering to the poor Arab have been provided the luxurious railway and canal accommodations from which they benefit so largely. Let them learn the process from Mr. De Leon's pages. When laborers are required for public works, such as the projected Soudan Railway, the workmen are taken arbitrarily from the cultivation of their own small patches of land—for poor and oppressed as his condition is, nearly every *fellah* is a landowner—and sent in district gangs to their destinations, where they receive no wages, often not even food, and are sometimes obliged to find their own tools in addition. These victims of the *corvée* are always of the poorest class, because those who have money can always purchase exemption.

The Suez Canal was commenced on the system here described, and was carried on in the same manner, until the sufferings of the laborers, who were literally worked to death, by hundreds, brought about the interference of the consular agents, after which regular though very small wages were paid. All the labor employed on the Khedive's enormous sugar estates in Upper Egypt extending 100 miles in length along the Nile, and from twelve to sixteen miles in breadth, is compulsory or *corvée* labor. If wages are paid at all, which is extremely doubtful, they are *very low*, and paid always in kind,—grain or molasses, on which the employer makes a profit.

Again, the yearly quota of recruits for the army is provided nominally by conscription, really by the arbitrary action of the governors of districts. The course is to send out into the highways and byways to seize the first men met with, who are kept in confinement until the sifting time arrives, when those who can pay the indispensable *baksheesh* to the recruiting officer are set free, and the others are sent to the different training depots in gangs, chained together like convicts, and "driven by soldiers to the place of embarkation escorted by howling and shrieking women, who see with them their daily bread and that of their children taken away." If any im-

provement has taken place in this respect, it is of very recent years. The population of Cairo and Alexandria are legally exempt from military service—*i.e.*, about one-tenth of the whole population of the country; and so the burden of recruiting falls exclusively on that portion of the able-bodied males most wanted for the cultivation of the fields.

There is not a creature in the world of fewer wants than the Egyptian *fellah*, whose necessities are limited to a coarse cotton tunic for covering, and a handful of dates for food. Still, *something* is necessary to his existence; and what between forced labor for others and the heavy taxation of his labor for himself, his land, as we are told, does not produce sufficient *in the gross* to pay the yearly taxes. It is to be noted, too, that the taxes are levied in kind, not in cash, affording the tax-collectors peculiar temptations to extortion, since their valuation of the crop is arbitrary. And so it happens that all the public burdens are borne by the poorest class, and the collectors of the revenue fatten on the bribes with which those who are able, purchase complete or partial exemption. A suggestive commentary on this point is furnished by the following extract from a recent letter of the Alexandria 'Times' correspondent, quoted by Mr. De Leon:—

"A contract was concluded yesterday by the Government with a Manchester house, which much improves the prospect of the July coupon: £500,000 is to be advanced, one-half now, one-half in London, on the 10th of July. The Government on its side undertakes to deliver by that date, in successive deliveries of 50,000 *ardebs* of wheat and beans, which are to be paid for at the market price of the day in Alexandria. This produce consists wholly of taxes paid by the peasants in kind; and when one thinks of the poverty-stricken, over-driven, under-fed *fellahs* in their miserable hovels, working late and early to fill the pockets of the creditors, the *punctual payment of the coupon ceases to be wholly a subject of gratification.*"

Egypt remains in some respects the unsolved riddle of our times. The cultivated area of country must have been in ancient days greatly larger than at present, and maintained a greatly larger population. All the cultivated soil has been redeemed from the desert; and the only condition on which it can be kept from returning to desert, is the

ceaseless labor of the people. The drift of sand from the great wastes in the interior of Africa is so constant, that it would in a few years, if not combated by irrigation and labor, cover up all man's works on the Nile banks and in the Delta. But the sand of Egypt is so composed that everywhere the desert may be made to "blossom as the rose" by pouring fresh water over its surface. Thus the Nile is the life of Egypt, and the rains which fall in the highlands of Abyssinia are the life of the Nile. Hence the care bestowed on irrigation; by means of which the Nile, when it yearly attains the proper level—an epoch which is celebrated as a high national festival—is led through countless channels, great and small, to be spread over the neighboring fields.

Napoleon I., in his notes on Egypt, written in 1790 and published by Bourrienne, estimated, "from a calculation made in Egypt with the greatest care, that this country, which at present has only a thousand square leagues of cultivated land, had formerly more than two thousand;" and he was of opinion that, "by a well-arranged system of irrigation, the result of good government, Egypt might be increased to the extent of eight or nine hundred square leagues." For this purpose he prophesied that "a work which will one day be undertaken will be to build dykes across the Damietta and Rosetta branches at the Cow's Belly," with the view of doubling the inundation of the land. The realisation of Napoleon's conception has been attempted by the construction of the *barrage*, or dam, commenced by Mehemet Ali and carried on by his successors. This work was deemed so important as to justify the construction of a fortress to protect it; but owing to the instability of the foundations, it is inoperative as a dam to raise the waters more than five feet, whereas a head of fifteen feet would be necessary to flood the Delta, as intended, without pumping. The desired object will yet be realised; and meanwhile the place possesses a certain strategical importance in protecting the bridges of communication over the two branches of the Nile at that spot.

Napoleon estimated that the population of Egypt proper in 1790 was only one-fourth of what it had been in ancient

times. Lane, in his 'Modern Egyptians,' gives the ancient population at six or seven millions; and quotes Diodorus Siculus to the effect that it was seven millions in the times of the ancient kings, and not less than three millions in his own day. Lane estimated the whole population of Egypt proper in 1835 as not more than two and a half millions; he was of opinion that the produce of the soil, if *nothing was exported*, would suffice for a population of four millions—and if all soil fit for cultivation were sown, for eight millions. The above estimates probably referred only to what is now called Lower Egypt, for the population of *Egypt proper* is now estimated at more than five millions. "It is claimed," says Mr. De Leon, "that in the last fifteen years 500,000 acres have been reclaimed, and that 300,000 more are in course of reclamation from the desert; and this result is due to the extension of the canal system effected by the Khedive."

There is certainly no other country in which good government can have so much influence on the material prosperity of the people; for in no other country can it affect to the same extent as it does in Egypt, the rainfall and the course of the seasons; where anarchy and tyranny, by interfering with irrigation and the laboring of the fields, must reduce at once the cultivable area of country and the population dependent on its produce. "Egypt is nothing if not agricultural;" and all the ambitious schemes of Mehemet Ali and his successors to create manufactures, have only retarded the progress of the country by interfering with agriculture, and have been the source of a wasteful expenditure to which much of the Khedive's financial troubles are due.

A large proportion of the whole population—probably one-sixth—being congregated in the large towns, are withdrawn from agriculture; the Khedive's standing army and military expeditions have absorbed an additional number of the able-bodied males; hence the want of labor for agricultural purposes is beginning to be sensibly felt, and the Khedive is turning his attention to the encouragement of Chinese immigration into Egypt for the purpose of filling the void, which "seems to offer the speediest as

well as most satisfactory solution of the problem."

The agricultural capabilities of Egypt, if developed by sufficient labor, properly directed, are practically unlimited. Some interesting statistics will be found in Mr. De Leon's pages relating to the cotton production of the country, which has developed from the first germ of 6000 pounds of cotton exported in 1821, to upwards of 300 millions of pounds exported in 1876. The culture of the sugar-cane, which, as the hobby of the present ruler of Egypt, has been pursued by him on a wasteful and extravagant system, has been hitherto the reverse of beneficial to the country or the people—since the labor of the *fellahs*, by which it has been carried on, if bestowed on their own fields, would have produced far more valuable results both to themselves and to their master. Although the sugar-culture is doubtless capable, under good management and with a sufficient labor-supply, of being profitably developed; the true interests of the country for many years to come lie in the grain and cotton culture, which are capable of indefinite extension. For the Khedive's services to civilisation; in the establishment of schools civil and military—especially in his disregard of Moslem prejudices by instituting female schools; in his extension of railways, and telegraphs, and canals; in the construction of harbors, docks, and light-houses; in his expenditure on roads and bridges, on gas and water works,—we must refer the reader to Mr. De Leon's interesting pages.

But there is one question—that of slavery—on which the Khedive's action merits more than a passing remark. When his Highness assured a deputation of the Anti-Slavery Society in London that he was most anxious to put down the slave-trade, he stated that all his efforts would be ineffectual until he should be endowed with the right of search over boats hoisting European colors, because the chief delinquents were *European traders*, who under the guise of a trade in ivory, really carried on a traffic in slaves, whom they conveyed down the Nile in boats covered by their respective flags. If the slave-trade were stopped, as he argued it would be if he were thus free to act against European traders,

slavery in Egypt would in fifteen or twenty years expire of inanition. The Khedive has given an earnest of sincerity in this matter by investing with absolute authority as Governor of the Soudan, Colonel Gordon, who, by his acceptance of the charge, is self-devoted to the stoppage of the trade at its fountain-head. Mr. De Leon describes the Soudan as "a territory larger and more populous than Egypt proper, to which it acknowledges the most indefinite kind of obedience, offering in its climate and savage inhabitants immense difficulties in the way of regular government or improvement;" and he is evidently not over-sanguine as to Gordon's success. But all who know the latter feel convinced that in his high and holy "quest," and if his life be spared, he will succeed if any mortal can.

The picture of the Khedive, as presented in Mr. De Leon's pages, has two aspects—the one bears the lineaments of the enlightened reformer, the reverse side shows the traits of the cruel oppressor of his people. Few men have ever accomplished so much in so short a time; but his progress has been that of the car of Juggernaut. In other countries, reforms come from below, and are the expression of the national will. But in Egypt all the adjuncts of modern civilisation have been forced in a few years on the most unprogressive people in the world by one man from above. In truth, the engine of "progress" has been run at so high a pressure, and at such a fearful cost to the poor Arabs, that if they were not very patient and submissive, an explosion might be feared.

"The Egyptian laborer has not risen much above the level of that life we see sculptured on the walls of the old tombs and temples thousands of years ago. He is still in the hands of merciless taskmasters—a strong ass crouching under burdens. Yet in spite of his dirt, his rags, his half-starved appearance, he looks happy, or, if not happy, content with his lot, hard as it seems to the stranger."

The result is, perhaps, largely due to the climate; it is a happiness only to breathe that dry, pure, exquisite air, which is so remarkable for its soothing effect on the brain, both of men and animals. At least this was the explanation of the patience and tractability of the poor *fellah* under his hard treatment given by Nubar Pasha; who further as-

sured us that animals, always placid and docile in Egypt, had been frequently known to become savage when transferred to Constantinople.

Enough has been said to show that the present condition of Egypt calls loudly for improvement. But the Khedive is at his wits' end for money to satisfy his creditors, and so long as he is thus embarrassed, it is vain to hope for any amelioration in the lot of the people. It is a trite saying that the prosperity of a country is a matter of good government: in Egypt the Khedive *is* the government; and notwithstanding the financial settlement effected by Mr. Goschen, the means have yet to be devised for preventing the Khedive from doing in the future what he has done in the past. Unforeseen expenses, too, have been imposed on him in connection with the life-and-death struggle in which his Suzerain is now engaged. The collection of sufficient revenue to meet all claims becomes every quarter more difficult and more grinding on the people. And there is too much reason to believe that the downward progress of Egypt towards national bankruptcy can only be arrested by cutting down to the roots of the cancer eating into her life.

Given on the one side a needy despot with corrupt governors and tax-collectors, and, on the other side, a patient, long-suffering people; and it requires no conjuror to tell what must be the condition of the latter. Here is the description as given by Ameneman, chief Librarian of Ramses the Great, in a papyrus writing now to be seen in the British Museum:—

"Have you ever represented to yourself in imagination the state of the rustic who tills the ground? Before he has put the sickle to his crop, the locusts have blasted part thereof; then come the rats and birds. If he is slack in housing his crop, the thieves are on him. His horse dies of weariness as it drags the wain. The tax-collector arrives, his agents are armed with clubs, he has negroes with him who carry whips of palm-branches. They all cry, 'Give us your grain,' and he has no way of avoiding their extortionate demands. Next, the wretch is caught, bound, and sent off to work without wage at the canals; his wife is taken and chained, his children are stripped and plundered."

This terrible picture, sketched more than three thousand years ago by a contemporary observer, is, to a great extent, applicable to the Egyptian laborer of the

present day, whose condition by the side of railways and telegraphs is a grotesque and horrible anachronism, the continuance of which constitutes a reproach to the European Powers, and especially to England, which benefits so largely by the sufferings of this unfortunate people. A noisy and aggressive party has hounded on the legions of Russia for the deliverance of the Bulgarians, whose general condition under Turkish rule, as has been lately proved beyond all question, was happy and prosperous if compared with that of the wretched *fellahs* of Egypt. But, unfortunately for the latter, they might be flogged or worked to death, almost to the last man, without raising an "Eastern question" dangerous to our tranquillity and interests.

The remedy for the state of things here exposed lies within the power of England; but it does not consist in the military occupation advocated by Mr. Dicey in the August number of the 'Nineteenth Century.'

What may be termed the selfish interests of this country in Egypt, apart from the concern which humanity and civilisation must feel in the elevation of a down-trodden people, are entirely limited to the maintenance of a secure communication with India by the shortest existing route—a communication which is now afforded by the Suez Canal. Speculative politicians, projecting their vision far into futurity, regard the Euphrates valley route as one which may possibly come to supersede the Suez Canal; and it was to prevent Russia from obtaining command of this potential route that a strong inclination existed in England to oppose, by force if necessary, that power establishing herself on the table-land of Armenia. The fear that Russia by the successive steps—of the conquest of Armenia, of the construction of a railway to the Persian Gulf, of the establishment of a naval station at the Euphrates' mouth—should ever be able to intercept our communication between Suez and Bombay with ships issuing from the Persian Gulf, may well be described as visionary. Even granting those successive steps on the road to India to have been surmounted, England, supposing her to maintain her supremacy at sea, could always seal up a Russian naval force at the mouth of the Persian Gulf. Should

that supremacy be ever lost, she need then no longer trouble herself about maintaining communications for the sake of an empire that would have departed from her.

Considered merely as an alternative to the Suez Canal route for England's military convenience, the Euphrates valley line could never repay the cost of its construction, which, including harbor-works at the Euphrates' mouth, would amount to at least twelve millions. At present an English soldier walks on board ship at Southampton, and walks on shore at Bombay. The utmost saving that would be effected in the present time of communication between those places, by the Euphrates line, would be seven days; and this would not suffice to counterbalance the inconveniences of trans-shipment.

The fears that were so generally excited in England, at the outbreak of the present war, by the supposed rapid advance of Russia to Constantinople, were based partly on shadow, partly on substance. These have now been much alleviated by the progress of events, which seem to demonstrate that the Turks, so far as concerns their fighting qualities, are worthy descendants of—

"The bold Timariot bands
That won and well can keep their lands."

The course of events has indeed been such as to discredit all forecast and falsify all anticipation. How is it that the Turk is fighting now as he has not fought for centuries? How is it that, from a state of supreme apathy in preparing against the storm which so long threatened, and which, when it burst, found him with armies unorganised and defences unfinished, he has suddenly sprung up like a strong man armed out of his apathetic sleep, and is now establishing his right to dominion—at least to the dominion of the sword—by irrefragable proofs?

The answer to the question is to be found in the fact that the Turk has at last been disabused of his obstinate conviction, that if attacked by Russia, other Powers would be found fighting on his side, and relieving him, as they had done before, from the trouble and responsibility of the conduct of the war. The fire of the old Turk race which was supposed

to be extinct, has been struck out again from the hard flint of sloth and indifference by the iron hand of an overwhelming necessity. And it is perhaps fortunate for Europe that such a people do not possess the genius for organisation and forethought; for if they can accomplish what they have done in the absence of those qualities, of what achievements would they not be capable if they possessed them?

It was erroneously supposed—not in England only—that the march of the Russian army to Constantinople would be a “walk over.” And in England it was feared that any action that might be deemed necessary on her part to protect Constantinople would be too late to be effective, if delayed until after the passage of the Danube. But late events would seem to show, that should England find it necessary to strike in at any future moment for the protection of her interests in Egypt or elsewhere, her interference would be decisive. If a Russian army should cross the Balkans during the present war, the strong position covering Adrianople, intrenched as the Turks can intrench, and defended by such men as defended Plevna, would constitute the *ne plus ultra* of the Russian advance. Adrianople is in free communication with the sea by two different railways, by means of which the Turkish defence would be fed to any extent with certainty and ease, while the supplies for the Russian attack would have to be brought from the Danube over the Balkan range.

Although, therefore, it is certain that the Russians have missed their stroke at Constantinople for the present year—probably for the present war—it is not irrelevant to this article to inquire how English interests in Egypt might be affected by the successful advance of Russia to the Bosphorus. The communication of England with India through Egypt may be described as a chain formed of three links: the voyage from England to Egypt; the transit through Egypt; the voyage from Suez to Bombay. The strength of the chain depends on the equal soundness of each particular link, since if one were broken the other two would be worthless. The security of the first link depends on England's supremacy in the

Mediterranean, against which the establishment of Russia at Constantinople would be generally regarded as a threat. The permanent possession of Constantinople by Russia might certainly endanger, *prospectively*, England's supremacy in the Mediterranean; because the passage of the Dardanelles and Bosphorus being forbidden by Russian batteries, the Black Sea would constitute for Russia a gigantic shipbuilding dock and harbor of refuge, where her war-ships could ride safe from all attack; whence also they might issue forth into the Mediterranean at pleasure, while perhaps the English fleet would be engaged elsewhere, and cut our communications with Egypt.

It may be regarded, however, as certain, that Russia would simply make use of a *temporary* occupation of Constantinople—not willingly, perhaps, but resignedly—for the purpose of dictating favorable conditions of peace; among which the *neutralisation* of the Bosphorus and Dardanelles would be foremost. This condition would imply the razing of all batteries commanding those Straits; and although Russian ships would thereby be enabled to pass freely into the Mediterranean, English ships could, as a counterpoise, with equal freedom enter the Black Sea, where they might either attack the Russian fleet, or shut it up in its harbors.

If England had been acting in alliance with Turkey during the present war, her access to the Black Sea, and the consequent power of coercing Russia by landing a force either at Varna or at Sukhum Kale, would have had an immediately decisive effect. Were England, therefore, to permit the establishment of Russia on the Bosphorus, she would part with the most effective means which, with Turkey's connivance, she now possesses, of coercing Russia, supposing the latter to meditate an advance to the Persian Gulf as a consequence of the conquest of Armenia.

In all other respects, the danger that might result in the future to England's supremacy in the Mediterranean, whether from the possession of Constantinople by Russia, or from the *neutralisation* of the Straits, would have to be met, and doubtless could be met, at the cost of increased naval estimates. In that case, whatever calls might be made on our

fleets in other quarters of the world, it would be always necessary to keep a powerful squadron, like a chained watchdog, at the mouth of the Dardanelles; but in order to provide a safe harbor for that squadron, it would be indispensable to acquire one somewhere in the immediate neighborhood. The magnificent natural harbor of Suda, in Crete, satisfies all the requisite conditions. If that were in our possession, Crete would serve at once as a *tête-du-pont* to cover our Egyptian bridge of passage to India, and as a bridle on Constantinople.

In one of his many recent contributions to the periodical press, Mr. Gladstone says: "Mr. Dicey seems to think, and it is quite possible, that an intervention of British power in Egypt might not be wholly disagreeable to the people of the country. But who has made this assertion respecting Crete?" And he proceeds to reprobate the idea that any Greek could be found "so debased, so grovelling," as to be willing "to part on any terms from the bright inheritance of the name bequeathed him by his sires." Notwithstanding Mr. Gladstone's confident belief, we have good reason to feel assured that a majority of the islanders earnestly desire to come under the protection of England. And, although England could not set the example of dismembering Turkey,—a measure which, as Mr. Gladstone truly argues, would form a very convenient precedent for other Powers,—if Turkish disasters should raise the question of the future disposal of Crete, it would be quite within the compass of diplomatic arrangement that England should acquire the harbor of Suda, with such surrounding land as might be requisite—an arrangement that would redound immensely to the advantage of the Cretans themselves.

We have said that we dissent from Mr. Dicey's proposed military occupation of Egypt, whether as a remedy for misgovernment or as a protection to the Suez Canal. So long as Egypt is friendly, the command of the Canal is to be insured by our supremacy at sea, not by flying the English flag at Port Said, or by an English garrison at Alexandria, or by forts on the Syrian side of the isthmus. So long as England commands the Mediterranean, not a corporal's guard could be landed in Egypt without her

permission; and the march of an army from Palestine across the Syrian desert may, at least for the present, be left out of consideration.

On the other hand, if Egypt were not friendly, England could take the country at any moment's notice, if such a high-handed measure should be forced upon her.

Any semblance of military occupation is therefore unnecessary for our purpose. We do not believe that the Khedive requires much pressure to induce him to reform his Government. He sees as plainly as any one can do, that by the oppression of his subjects he is killing the goose that lays his golden eggs; and that the present system cannot last much longer. He knows, moreover, that the only selfish interest England has to serve is the secure transit for her ships and troops through his territory; and that interest would be best served by Egypt becoming strong and prosperous. To this end all that is required is an honest administration, under which half of the tax now collected by corrupt and extortionate publicans might be remitted, and the revenue would still be a gainer. But the personal extravagance of the Khedive lies at the root of the whole matter; and so long as that is allowed to continue, no improvement is possible.

Let him place his affairs in the hands of trustees; accept for himself such a civil list as that of Queen Victoria; sternly repress bribery, extortion, and cruelty, even though it should be necessary to hang a *sheik*, perhaps a *mudir*, as an example; curb his extravagant tastes for railways to the moon, for the building of palaces, opera and play houses, and for the lavish entertainment of every entity and nonentity who may visit Cairo;—in a word, let him enter the honest society of constitutional rulers, and a splendid future awaits a country which would magnificently repay good government.

Mr. De Leon believes that the Khedive would easily yield to pressure in this matter, and England is the country that can most effectually exert it.

One thing is certain. If Egypt becomes a prey to bankruptcy and anarchy, England, for her own sake, will be obliged to undertake, at a late hour

and at great disadvantage, a task that might be accomplished now at a comparatively small outlay of trouble and responsibility. There is no reason, however, why England should undertake the good work alone, but rather every reason why she should carry along with her France, whose interest in the well-

being of Egypt is only second to her own.

It is not the military occupation of Egypt that is in question: *it is the regeneration of that unhappy country* which is the task imposed on England by her own interests and by the interests of humanity.—*Blackwood's Magazine.*

HOURS IN A LIBRARY.—MASSINGER.

BY LESLIE STEPHEN.

IN one of the best of his occasional essays, Kingsley held a brief for the plaintiffs in the old case of Puritans *versus* Playwrights. The litigation in which this case represents a minor issue has lasted for a period far exceeding that of the most pertinacious lawsuit, and is not likely to come to an end within any assignable limits of time. When the discussion is pressed home, it is seen to involve fundamentally different conceptions of human life and its purposes; and it can only cease when we have discovered the grounds of a permanent conciliation between the ethical and the æsthetic elements of human nature. The narrower controversy between the stage and the Church has itself a long history. It has left some curious marks upon English literature. The prejudice which uttered itself through the Puritan Prynne was inherited, in a later generation, by the High-Churchmen Collier and William Law. The attack, it is true, may be intentionally directed—as in Kingsley's essay—against the abuse of the stage rather than against the stage itself. Kingsley pays the usual tribute to Shakespeare whilst denouncing the whole literature of which Shakespeare's dramas are the most conspicuous product. But then, everybody always distinguishes in terms between the use and the abuse; and the line of demarcation generally turns out to be singularly fluctuating and uncertain. You can hardly demolish Beaumont and Fletcher without bringing down some of the outlying pinnacles, if not shaking the very foundations, of the temple sacred to Shakespeare.

It would be regrettable, could one stop to regret the one-sided and illogical construction of the human mind, that a fair

judgment in such matters seems to require incompatible qualities. Your impartial critic or historian is generally a man who leaves out of account nothing but the essential. His impartiality means sympathy with the commonplace and incapacity for understanding heroic faith and overpowering enthusiasm. He fancies that a man or a book can be judged by balancing a list of virtues and vices as if they were separate entities lying side by side in a box, instead of different aspects of a vital force. On the other hand, the vivid imagination which restores dead bones to life makes its possessor a partisan in extinct quarrels, and as short-sighted and unfair a partisan as the original actors. Roundheads and Cavaliers have been dead these two centuries.

Dumb are those names erewhile in battle
loud;
Dreamfooted as the shadow of a cloud
They flit across the ear.

Yet few even amongst modern writers are capable of doing justice to both sides without first making both sides colorless. Hallam judges men in the throes of a revolution as though they were parties in a law-suit to be decided by precedents and parchments, and Mr. Carlyle cannot appreciate Cromwell's magnificent force of character without making him all but infallible and impeccable. Critics of the early drama are equally one-sided. The exquisite literary faculty of Charles Lamb revelled in detecting beauties which had been covered with the dust of oblivion during the reign of Pope. His appreciation was intensified by that charm of discovery which finds its typical utterance in Keats's famous sonnet. He was scarcely a more impartial judge of Fletcher or Ford than "Stout Cortes"

of the new world revealed by his enterprise. We may willingly defer to his judgment of the relative value of the writers whom he discusses, but we must qualify his judgment of their intrinsic excellence by the recollection that he speaks as a lover. To him and other unqualified admirers of the old drama the Puritanical onslaught upon the stage presented itself as the advent of a gloomy superstition, ruthlessly stamping out all that was beautiful in art and literature. Kingsley, an admirable hater, could perceive only the opposite aspect of the phenomena. To him the Puritan protest appears as the voice of the enlightened conscience; the revolution means the troubling of the turbid waters at the descent of the angel; Prynne's *Histriomastix* is the blast of the trumpet at which the rotten and polluted walls of Jericho are to crumble into dust. The stage, which represented the tone of aristocratic society, rightfully perished with the order which it flattered. Courtiers had learnt to indulge in a cynical mockery of virtue, or found an unholy attraction in the accumulation of extravagant horrors. The English drama, in short, was one of those evil growths which are fostered by deeply-seated social corruption, and are killed off by the breath of a purer air. That such phenomena occur at times is undeniable. Mr. Symonds has recently shown us in his history of the Renaissance, how the Italian literature, to which our English dramatists owed so many suggestions, was the natural fruit of a society poisoned at the roots. Nor, when we have shaken off that spirit of slavish adulation in which modern antiquarians and critics have regarded the so-called Elizabethan dramatists, can we deny that there are symptoms of a similar mischief in their writings. Some of the most authoritative testimonials have a suspicious element. Praise has been lavished upon the most questionable characteristics of the old drama. Apologists have been found, not merely for its daring portrayal of human passion, but for its wanton delight in the grotesque and the horrible for its own sake; and some critics have revenged themselves for the straitlaced censures of Puritan morality by praising work in which the author strives to atone for imaginative weakness by a

choice of revolting motives. Such adulation ought to have disappeared with the first fervor of rehabilitation. Much that has been praised in the old drama is rubbish, and some of it disgusting rubbish.

The question, however, remains, how far we ought to adopt either view of the situation? Are we bound to cast aside the later dramas of the school as simply products of corruption? It may be of interest to consider the light thrown upon this question by the works of Massinger, nearly the last of the writers who can really claim a permanent position in literature. Massinger, born in 1584, died in 1639. His surviving works were composed, with one exception, after 1620. They represent, therefore, the tastes of the play-going classes during the rapid development of the great struggle which culminated in the rebellion. In a literary sense it is the period when the imaginative impulse represented by the great dramatists was running low. It is curious to reflect that, if Shakespeare had lived out his legitimate allowance of threescore years and ten, he might have witnessed the production, not only of the first but nearly all the best works of his school; had his life been prolonged for ten years more, he would have witnessed its final extinction. Within these narrow limits of time the drama had undergone a change corresponding to the change in the national mood. The difference, for example, between Marlowe and Massinger at the opening and the close of the period—though their births were separated by only twenty years—corresponds to the difference between the temper of the generation which repelled the Armada and the temper of the generation which fretted under the rule of the first Stuarts. The misnomer of Elizabethan as applied to the whole school indicates an implicit perception that its greater achievements were due to the same impulse which took for its outward and visible symbol the name of the great Queen. But it has led also to writers being too summarily classed together who really represent very different phases in a remarkable evolution. After making all allowances for personal idiosyncrasies, we can still see how profoundly the work of Massinger is colored by the

predominant sentiment of the later epoch.

As little is known of Massinger's life as of the lives of most of the contemporary dramatists who had the good or ill fortune to be born before the days of the modern biographical mania. It is known that he, like most of his brethren, suffered grievously from impecuniosity; and he records in one of his dedications his obligations to a patron without whose bounty he would for many years have "but faintly subsisted." His father had been employed by Henry, Earl of Pembroke; but Massinger, though acknowledging a certain debt of gratitude to the Herbert family, can hardly have received from them any effective patronage. What ever their relations may have been, it has been pointed out by Mr. Rawson Gardiner* that Massinger probably sympathised with the political views represented by the two sons of his father's patron who were successively Earls of Pembroke during the reigns of the first James and Charles. On two occasions he got into trouble with the licenser for attacks, real or supposed, upon the policy of the government. More than one of his plays contain, according to Mr. Gardiner, references to the politics of the day as distinct as those conveyed by a cartoon in *Punch*. The general result of his argument is to show that Massinger sympathised with the views of an aristocratic party who looked with suspicion upon the despotic tendencies of Charles's government, and thought that they could manage refractory parliaments by adopting a more spirited foreign policy. Though in reality weak and selfish enough, they affected to protest against the materialising and oppressive policy of the extreme royalists. How far these views represented any genuine convictions, and how far Massinger's adhesion implied a complete sympathy with them, or might indicate that kind of delusion which often leads a mere literary observer to see a lofty intention in the schemes of a selfish politician, are questions which I am incompetent to discuss and which obviously do not admit of a decided answer. They confirm, as far as they go, the general impression as to Massinger's point of view which we

should derive from his writings without special interpretation. Shakespeare, says Coleridge, gives "the permanent politics of human nature" (whatever they may be!), "and the only predilection which appears shows itself in his contempt of mobs and the populace. Massinger is a decided Whig; Beaumont and Fletcher high-flying, passive-obedience Tories." The author of *Coriolanus*, one would be disposed to say, showed himself a thoroughgoing aristocrat, though in an age when the popular voice had not yet given utterance to systematic political discontent. He was still a stranger to the sentiments symptomatic of an approaching revolution, and has not explicitly pronounced upon issues hardly revealed even to

The prophetic soul
Of the wide world dreaming of things to come.

The sense of national unity evolved in the great struggle with Spain had not yet been lost in the discord of the rising generation. The other classifications may be accepted with less reserve. The dramatists represented the views of their patrons. The drama reflected in the main the sentiments of an aristocratic class alarmed by the growing vigor of the Puritanical citizens. Fletcher is, as Coleridge says, a thoroughgoing Tory; his sentiments in *Valentinian* are, to follow the same guidance, so "very slavish and reptile" that it is a trial of charity to read them. Nor can we quite share Coleridge's rather odd surprise that they should emanate from the son of a bishop, and that the duty to God should be the supposed basis. A servile bishop in those days was not a contradiction in terms, and still less a servile son of a bishop; and it must surely be admitted that the theory of Divine Right may lead, however illogically, to reptile sentiments. The difference between Fletcher and Massinger, who were occasional collaborators and apparently close friends (Massinger, it is said, was buried in Fletcher's grave), was probably due to difference of temperament as much as to the character of Massinger's family connection. Massinger's melancholy is as marked as the buoyant gaiety of his friend and ally. He naturally represents the misgivings which must have beset the more thoughtful members of his

* *Contemporary Review* for August, 1876.

party, as Fletcher represented the careless vivacity of the Cavalier spirit. Massinger is given to expatiating upon the text that

Subjects' lives
Are not their prince's tennis-balls, to be
bandied
In sport away.

The high-minded Pulcheria, in the *Emperor of the East*, administers a bitter reproof to a slavish "projector" who

Roars out
All is the King's, his will above the laws ;
who whispers in his ear that nobody
should bring a salad from his garden
without paying "gabel" or kill a hen
without excise ; who suggests that, if a
prince wants a sum of money, he may
make impossible demands from a city
and exact arbitrary fines for its non-performance.

Is this the way
To make our Emperor happy? Can the
groans
Of his subjects yield him music? Must his
thresholds
Be wash'd with widows' and wrong'd orphans'
tears,
Or his power grow contemptible?

Mr. Gardiner tells us that at the time at which these lines were written they need not have been taken as referring to Charles. But the vein of sentiment which often occurs elsewhere is equally significant of Massinger's view of the political situation of the time. We see what were the topics that were beginning to occupy men's minds.

Dryden made the remark, often quoted for purposes of indignant reprobation by modern critics, that Beaumont and Fletcher "understood and imitated the conversation of gentlemen much better" (than Shakespeare); "whose wild debaucheries and quickness of wit in repartees no poet can ever paint as they did." It is, of course, easy enough to reply that in the true sense of the word "gentlemen" Shakespeare's heroes are incomparably superior to those of his successors; but then this is just the sense in which Dryden did not use the word. His real meaning indicates a very sound piece of historical criticism. Fletcher describes a new social type; the "King's Young Courtier" who is deserting the good old ways of his father, the "old courtier of the Queen." The

change is but one step in that continuous process which has substituted the modern gentleman for the old feudal noble; but the step taken at that period was great and significant. The chivalrous type, represented in Sidney's life and Spenser's poetry, is beginning to be old-fashioned and out of place as the industrial elements of society become more prominent. The aristocrat in the rising generation finds that his occupation is going. He takes to those "wild debaucheries" which Dryden oddly reckons among the attributes of a true gentleman; and learns the art of "quick repartee" in the courtly society which has time enough on its hands to make a business of amusement. The euphuism and allied affectations of the earlier generation had a certain grace, as the external clothing of a serious chivalrous sentiment; but it is rapidly passing into a silly coxcombry to be crushed by Puritanism or snuffed out by the worldly cynicism of the new generation. Shakespeare's Henry or Romeo may indulge in wild freaks or abandon themselves to the intense passions of vigorous youth; but they will settle down into good statesmen and warriors as they grow older. Their love-making is a phase in their development, not the business of their lives. Fletcher's heroes seem to be not only occupied for the moment, but to make a permanent profession of what with their predecessors was a passing phase of youthful ebullience. It is true that we have still a long step to make before we sink to the mere *roué*, the shameless scapegrace and cynical man about town of the restoration. To make a Wycherley you must distil all the poetry out of a Fletcher. Fletcher is a true poet; and the graceful sentiment, though mixed with a coarse alloy, still repels that unmitigated grossness which, according to Burke's famous aphorism, is responsible for half the evil of vice. He is still alive to generous and tender emotions, though it can scarcely be said that his morality has much substance in it. It is a sentiment, not a conviction, and covers without quenching many ugly and brutal emotions.

In Fletcher's wild gallants, still adorned by a touch of the chivalrous; reckless, immoral, but scarcely cynical; not sceptical as to the existence of virtue, but

only admitting morality by way of parenthesis to the habitual current of their thoughts, we recognise the kind of stuff from which to frame the cavaliers who will follow Rupert and be crushed by Cromwell. A characteristic sentiment which occurs constantly in the drama of the period represents the soldier out of work. We are incessantly treated to lamentations upon the ingratitude of the comfortable citizens who care nothing for the men to whom they owed their security. The political history of the times explains the popularity of such complaints. Englishmen were fretting under their enforced abstinence from the exciting struggles on the Continent. There was no want of Dugald Dalgettys returning from the wars to afford models for the military braggart or the bluff honest soldier, both of whom go swaggering through so many of the plays of the time. Clarendon in his *Life* speaks of the temptations which beset him from mixing with the military society of the time. There was a large and increasing class, no longer finding occupation in fighting Spaniards and searching for Eldorado, and consequently, in the Yankee phrase, "spoiling for a fight." When the time comes they will be ready enough to fight gallantly and to show an utter incapacity for serious discipline. They will meet the citizens, whom they have mocked so merrily, and find that reckless courage and spasmodic chivalry do not exhaust the qualifications for military success.

Massinger represents a different turn of sentiment which would be encouraged in their minds by the same social conditions. Instead of abandoning himself frankly to the stream of youthful sentiment, he feels that it has a dangerous aspect. The shadow of coming evils was already dark enough to suggest various forebodings. But he is also a moraliser by temperament. Mr. Ward says that his strength is owing in a great degree to his appreciation of the great moral forces; and the remark is only a confirmation of the judgment of most of his critics. It is, of course, not merely that he is fond of adding little moral tags of questionable applicability to the end of his plays. "We are taught," he says in the *Fatal Dowry*,

By this sad precedent, how just soever
Our reasons are to remedy our wrongs,
We are yet to leave them to their will and
power

That to that purpose have authority.

But it is, to say the least, doubtful whether anybody would have that judicious doctrine much impressed upon him by seeing the play itself. Nor can one rely much upon the elaborate and very eloquent defence of his art in the *Roman Actor*. Paris, the actor, sets forth very vigorously that the stage tends to lay bare the snares to which youth is exposed and to inflame a noble ambition by example. If the discharge of such a function deserves reward from the Commonwealth—

Actors may put in for as large a share

As all the sects of the philosophers;—

They with cold precepts—perhaps seldom
read—

Deliver what an honorable thing

The active virtue is; but does that fire

The blood, or swell the veins with emulation

To be both good and great, equal to that

Which is presented in our theatres?

Massinger goes on to show, after the fashion of Jaques in *As You Like It*, that the man who chooses to put on the cap is responsible for the application of the satire. He had good reasons, as we have seen, for feeling sensitive as to misunderstandings—or, rather, too thorough understandings—of this kind.

To some dramatists of the time, who should put forward such a plea, one would be inclined to answer in the sensible words of old Fuller. "Two things," he says, "are set forth to us in stage-plays; some grave sentences, prudent counsels, and punishment of vicious examples: and with these desperate oaths, lustful talk, and riotous acts, are so personated to the life, that wantons are tickled with delight, and feed their palates upon them. It seems the goodness is not portrayed with equal accents of liveliness as the wicked things are; otherwise men would be deterred from vicious courses, with seeing the woful success which follows them"—a result scarcely to be claimed by the actors of the day. Massinger, however, shows more moral feeling than is expended in providing sentiments to be tacked on as an external appendage, or satisfied by an obedience to the demands of poetic

justice. He is not content with knocking his villains on the head—a practice in which he, like his contemporaries, indulges with only too much complacency. The idea which underlies most of his plays is a struggle of virtue assailed by external or inward temptations. He is interested by the ethical problems introduced in the play of conflicting passions, and never more eloquent than in uttering the emotions of militant or triumphant virtue. His view of life indeed is not only grave, but has a distinct religious coloring. From various indications, it is probable that he was a Roman Catholic. Some of these are grotesque enough. The *Renegado*, for example, not only shows that Massinger was, for dramatic purposes at least, an ardent believer in baptismal regeneration, but includes—what one would scarcely have sought in such a place—a discussion as to the validity of lay-baptism. The first of his surviving plays, the *Virgin Martyr* (in which he was assisted by Dekker) is simply a dramatic version of an ecclesiastical legend. Though it seems to have been popular at the time, the modern reader will probably think that, in this case at least, the religious element is a little out of place. An angel and a devil take an active part in the performance; miracles are worked on the stage; the unbelievers are so shockingly wicked, and the Christians so obtrusively good, that we—the worldly-minded—are sensible of a little recalcitration, unless we are disarmed by the simplicity of the whole performance. Religious tracts of all ages and in all forms are apt to produce this ambiguous effect. Unless we are quite in harmony with their assumptions, we feel that they deal too much in conventional rose color. The angelic and diabolic elements are not so clearly discriminated in this world, and should show themselves less unequivocally on the stage, which ought to be its mirror. An audience in the state of mind which generates the true miracle-play might justify such an embodiment of its sentiment. But when forcibly transplanted to the Jacobean stage, we feel that the performance has not the simple earnestness by which alone it can be justified. The sentiment has a certain unreality, and the *naïveté* suggests affectation. The

implied belief is got up for the moment and has a hollow ring. And therefore, the whole work, in spite of some eloquence, is nothing better than a curiosity, as an attempt at the assimilation of a heterogeneous form of art.

A similar vein of sentiment, though not showing itself in so undiluted a form, runs through most of Massinger's plays. He is throughout a sentimentalist and a rhetorician. He is not, like the greatest men, dominated by thoughts and emotions which force him to give them external embodiment in life-like symbols. He is rather a man of much real feeling and extraordinary facility of utterance, who finds in his stories convenient occasions for indulging in elaborate didactic utterances upon moral topics. It is probably this comparative weakness of the higher imaginative faculty which makes Lamb speak of him rather disparagingly. He is too self-conscious and too anxious to enforce downright moral sentiments to satisfy a critic by whom spontaneous force and direct insight were rightly regarded as the highest poetic qualities. A single touch in Shakespeare, or even in Webster or Ford, often reveals more depth of feeling than a whole scene of Massinger's facile and often deliberately forensic eloquence. His temperament is indicated by the peculiarities of his style. It is, as Coleridge says, poetry differentiated by the smallest possible degree from prose. The greatest artists of blank verse have so complete a mastery of their language that it is felt as a fibre which runs through and everywhere strengthens the harmony, and is yet in complete subordination to the sentiment. With a writer of the second order, such as Fletcher, the metre becomes more prominent, and at times produces a kind of monotonous sing-song, which begins to remind us unpleasantly of the still more artificial tone characteristic of the rhymed tragedies of the next generation. Massinger diverges in the opposite direction. The metre is felt enough and only just enough to give a more stately step to rather florid prose. It is one of his marks that a line frequently ends by some insignificant "of" or "from," so as to exclude the briefest possible pause in reading. Thus, to take an example

pretty much at random, the following instance might be easily read without observing that it was blank verse at all:—

"Your brave achievements in the war, and what you did for me, unspoken, because I would not force the sweetness of your modesty to a blush, are written here; and that there might be nothing wanting to sum up my numerous engagements (never in my hopes to be cancelled), the great duke, our mortal enemy, when my father's country lay open to his fury and the spoil of the victorious army, and I brought into his power, hath shown himself so noble, so full of honor, temperance, and all virtues that can set off a prince; that, though I cannot render him that respect I would, I am bound in thankfulness to admire him."

Such a style is suitable to a man whose moods do not often hurry him into impetuous, or vivacious, or epigrammatic utterance. As the Persian poet says of his country: his warmth is not heat and his coolness is not cold. He flows on in a quiet current, never breaking into foam or fury, but vigorous, and invariably lucid. As a pleader before a law-court—the character in which, as Mr. Ward observes, he has a peculiar fondness for presenting himself—he would carry his audience along with him, but scarcely hold them in spell-bound astonishment or hurry them into fits of excitement. Melancholy resignation, or dignified dissatisfaction will find in him a powerful exponent, but scarcely despair, or love, or hatred, or any social phase of pure unqualified passion.

The natural field for the display of such qualities is the romantic drama, which Massinger took from the hands of Beaumont and Fletcher, and endowed with greater dignity and less poetic fervor. For the vigorous comedy of real life, as Jonson understood it, he has simply no capacity; and in his rare attempts at humor, succeeds only in being at once dull and dirty. His stage is generally occupied with dignified lords and ladies, professing the most chivalrous sentiments, which are occasionally too highflown and overstrained to be thoroughly effective, but which are yet uttered with sufficient sincerity. They are not mere hollow pretences, consciously adopted to conceal base motives; but one feels the want of an occasional infu-

sion of the bracing air of common sense. It is the voice of a society still inspired with the traditional sentiments of honor and self-respect, but a little afraid of contact with the rough realities of life. Its chivalry is a survival from a past epoch, not a spontaneous outgrowth of the most vital elements of contemporary development. In another generation, such a tone will be adopted by a conscious and deliberate artifice, and be reflected in mere theatrical rant. In the past, it was the natural expression of a high-spirited race, full of self-confidence and pride in its own vigorous audacity. In this transitional period it has a certain hectic flush, symptomatic of approaching decay; anxious to give a wide berth to realities, and most at home in the border-land where dreams are only half dispelled by the light of common day. *Don Quixote* had sounded the knell of the old romance, but something of the old spirit still lingers, and can tinge with an interest, not yet wholly artificial, the lives and passions of beings who are thus hovering on the outskirts of the living world. The situations most characteristic of Massinger's tendency are in harmony with this tone of sentiment. They are romances taken from a considerable variety of sources, developed in a clearly connected series of scenes. They are wanting in the imaginative unity of the great plays, which show that a true poet has been profoundly moved by some profound thought embodied in a typical situation. He does not, like Shakespeare, seize his subject by the heart, because it has first fascinated his imagination; nor, on the other hand, have we that bewildering complexity of motives and intricacy of plot which shows at best a lawless and wandering fancy; and which often fairly puzzles us in many English plays, and enforces frequent reference to the list of personages in order to disentangle the crossing threads of the action. The plays are a gradual unravelling of a series of incidents, each following intelligibly from the preceding situation, and suggestive of many eloquent observations, though not developments of one master-thought. We often feel that, if external circumstances had been propitious, he would have expressed himself more naturally in the form of a prose romance than in a

drama. Nor again, does he often indulge in those exciting and horrible situations which possessed such charms for his contemporaries. There are occasions, it is true, in which this element is not wanting. In the *Unnatural Combat*, for example, we have a father killing his son in a duel, by the end of the second act; and when, after a succession of horrors of the worst kind, we are treated to a ghost, "full of wounds, leading in the shadow of a lady, her face leprous," and the worst criminal is killed by a flash of lightning, we feel that we were fully entitled to such a catastrophe. We can only say, in Massinger's words,—

May we make use of
This great example, and learn from it that
There cannot be a want of power above
To punish murder and unlawful love!

The *Duke of Milan*, again, culminates with a horrible scene, rivalling, though with less power, the grotesque horrors of Webster's *Duchess of Malfi*. Other instances might be given of concessions to that blood-and-thunder style of dramatic writing for which our ancestors had a never-failing appetite. But, as a rule, Massinger inclines, as far as contemporary writers will allow him, to the side of mercy. Instead of using slaughter so freely that a new set of actors has to be introduced to bury the old—a misfortune which sometimes occurs in the plays of the time—he generally tends to a happy solution, and is disposed not only to dismiss his virtuous characters to felicity, but even to make his villains virtuous. We have not been excited to that pitch at which our passions can only be harmonised by an effusion of blood, and a mild solution is sufficient for the calmer feelings which have been aroused.

This tendency illustrates Massinger's conception of life in another sense. Nothing is more striking in the early stage than the vigor of character of most of these heroes. Individual character, as it is said, takes the place in the modern of fate in the ancient drama. Every man is run in a mould of iron, and may break, but cannot bend. The fitting prologue to the whole literature is provided by Marlowe's *Tamburlaine*, with his superhuman audacity, and vast bombastic rants, the incarnation of a towering ambition which scorns all laws but its own devouring passion. Faustus

braving all penalties, human and divine, is another variety of the same type; and when we have to do with a weak character like Edward II., we feel that it is his natural destination to be confined in a loathsome dungeon, with mouldy bread to eat and ditch-water to drink. The world is for the daring; and though daring may be pushed to excess, weakness is the one unpardonable offence. A thoroughgoing villain is better than a trembling saint. If Shakespeare's instinctive taste revealed the absurdity of the bombastic exaggeration of such tendencies, his characters are equally unbending. His villains die, like Macbeth and Iago, with their teeth set, and scorn even a deathbed repentance. Hamlet exhibits the unfitness for a world of action of the man who is foolish enough to see two sides to every question. So again, Chapman, the writer who in fullness and fire of thought approaches most nearly to Shakespeare, is an ardent worshipper of pure energy of character. His Bussy d'Ambois cannot be turned from his purpose even by the warnings of the ghost of his accomplice, and a mysterious spirit summoned expressly to give advice. An admirably vigorous phrase from one of the many declamations of his hero Byron—another representative of the same haughty strength of will—gives his theory of character:—

Give me a spirit that on this life's rough sea
Loves t' have his sail filled with a lusty wind,
Even till his sailyards tremble, his masts
crack,
And his rapt ship run on her side so low
That she drinks water, and her keel plows air.

Pure, undiluted energy, stern force of will, delight in danger for its own sake, contempt for all laws but the self-imposed, those are the cardinal virtues, and challenge our sympathy even when they lead their possessor to destruction. The psychology implied in Jonson's treating of "humor" is another phase of the same sentiment. The side by which energetic characters lend themselves to comedy is the exaggeration of some special trait which determines their course as tyrannically as ambition governs the character suited for tragedy.

When we turn to Massinger, this boundless vigor has disappeared. The blood has grown cool. The tyrant no longer forces us to admiration by the

fullness of his vitality, and the magnificence of his contempt for law. Whether for good or bad, he is comparatively a poor creature. He has developed an uneasy conscience, and even whilst affecting to defy the law, trembles at the thought of an approaching retribution. His boasts have a shrill, querulous note in them. His creator does not fully sympathize with his passion. Massinger cannot throw himself into the situation; and is anxious to dwell upon the obvious moral considerations which prove such characters to be decidedly inconvenient members of society for their tamer neighbors. He is of course the more in accordance with a correct code of morality, but fails correspondingly in dramatic force and brilliance of color. To exhibit a villain, truly, even to enable us to realize the true depth of his villany, one must be able for a moment to share his point of view, and therefore to understand the true law of his being. It is a very sound rule in the conduct of life, that we should not sympathize with scoundrels. But the morality of the poet, as of the scientific psychologist, is founded upon the unflinching veracity which sets forth all motives with absolute impartiality. Some sort of provisional sympathy with the wicked there must be, or they become mere impossible monsters or the conventional scarecrows of improving tracts.

This is Massinger's weakest side. His villains want backbone, and his heroes are deficient in simple overmastering passion, or supplement their motives by some overstrained and unnatural crotchets. Impulsiveness takes the place of vigor, and indicates the want of a vigorous grasp of the situation. Thus, for example, the *Duke of Milan*, which is certainly amongst the more impressive of Massinger's plays, may be described as a variation upon the theme of *Othello*. To measure the work of any other writer by its relation to that masterpiece is, of course, to apply a test of undue severity. Of comparison, properly speaking, there can be no question. The similarity of the situation, however, may bring out Massinger's characteristics. The Duke, who takes the place of Othello, is, like his prototype, a brave soldier. The most spirited and effective passage in the play is the scene in which he is

brought as a prisoner before Charles V., and not only extorts the admiration of his conqueror, but wins his liberty by a dignified avowal of his previous hostility, and avoidance of any base compliance. The Duke shows himself to be a high-minded gentleman, and we are so far prepared to sympathize with him when exposed to the wiles of Francisco—the Iago of the piece. But unfortunately the scene is not merely a digression in a constructive sense, but involves a psychological inconsistency. The gallant soldier contrives to make himself thoroughly contemptible. He is represented as excessively uxorious, and his passion takes the very disagreeable turn of posthumous jealousy. He has instructed Francisco to murder the wife whom he adores in case of his own death during the war, and thus to make sure that she could not marry anybody else. On his return, the wife, who has been informed by the treachery of Francisco of this pleasant arrangement, is naturally rather cool to him; whereupon he flies into a rage and swears that he will

Never think of curs'd Marcellia more.

His affection returns in another scene, but only in order to increase his jealousy, and on hearing Francisco's slander he proceeds to stab his wife out of hand. It is the action of a weak man in a passion, not of a noble nature tortured to madness. Finding out his mistake, he of course repents again, and expresses himself with a good deal of eloquence which would be more effective if we could forget the overpowering pathos of the parallel scene in *Othello*. Much sympathy, however, is impossible for a man whose whole conduct is so flighty, and so obviously determined by the immediate demands of successive situations of the play, and not the varying manifestation of a powerfully conceived character. Francisco is a more coherent villain, and an objection made by Hazlitt to his apparent want of motive is at least equally valid against Iago; but he is of course but a diluted version of that superlative villain, as Marcellia is a rather priggish and infinitely less tender Desdemona. The failure, however, of the central figure to exhibit any fixity of character is the real weakness of the play; and the horrors of the last scene fail to atone for

the want of the vivid style which reveals an "intense and gloomy mind."

This kind of versatility and impulsiveness of character is revealed by the curious convertibility—if one may use the word—of his characters. They are the very reverse of the men of iron of the previous generation. They change their state of mind as easily as the characters of his contemporary drama put on disguises. We are often amazed at the simplicity which enables a whole family to accept the brother and father to whom they have been speaking ten minutes before as an entire stranger, because he has changed his coat or talks broken English. The audience must have been easily satisfied in such cases; but it requires almost equal simplicity to accept some of Massinger's transformations. In such a play as the *Virgin Martyr*, a religious conversion is a natural part of the scheme. Nor need we be surprised at the amazing facility with which a fair Mahomedan is converted in the *Renegade* by the summary assertion that the "juggling prophet" is a cheat and taught a pigeon to feed in his ear. Can there be strength, it is added, in that religion which allows us to fear death? "This is unanswerable," exclaims the lady, "and there is something tells me I err in my opinion." This is almost as good as the sudden thought of swearing eternal friendship. The hardened villain of the first act in the same play falls into despair in the third, and, with the help of an admirable Jesuit, becomes a most useful and exemplary convert by the fifth. But such catastrophes may be regarded as more or less miraculous. The versatility of character is more singular when religious conversions are not in question. "I am not certain," says Philanax in the *Emperor of the East* :—

A prince so soon in his disposition altered
Was never heard nor read of.

That proves that Philanax was not familiar with Massinger's plays. The disposition of princes and of subjects is there constantly altered with the most satisfactory result. It is not merely that, as often happens elsewhere, the villains are summarily forced to repent at the end of a play, like Angelo in *Measure for Measure*, in order to allow the curtain to fall upon a prospect of happiness. Such

forced catastrophes are common, if clumsy enough. But there is something malleable in the very constitution of Massinger's characters. They repent half way through the performance, and see the error of their ways with a facility which we could wish to be imitated in common life. The truth seems to be that Massinger is subject to an illusion natural enough to a man who is more of the rhetorician than the seer. He fancies that eloquence must be irresistible. He takes the change of mood produced by an elevated appeal to the feelings for a change of character. Thus, for example, in the *Picture*—a characteristic though not a very successful play—we have a story founded upon the temptations of a separated husband and wife. The husband carries with him a magical picture, which grows dark or bright according to the behavior of the wife, whom it represents. The husband is tempted to infidelity by a queen, herself spoilt by the flatteries of an uxorious husband; and the wife by a couple of courtiers, who have all the vices of Fletcher's worst heroes without any of their attractions. The interest of the play, such as it is, depends upon the varying moods of the chief actors, who become so eloquent under a sense of wrong or a reflection upon the charms of virtue, that they approach the bounds of vice, and then gravitate back to respectability. Everybody becomes perfectly respectable before the end of the play is reached, and we are to suppose that they will remain respectable ever afterwards. They avoid tragic results by their want of the overmastering passions which lead to great crimes or noble actions. They are really eloquent, but even more moved by their eloquence than the spectators can be. They form the kind of audience which would be most flattering to an able preacher, but in which a wise preacher would put little confidence. And, therefore, besides the fanciful incident of the picture, they give us an impression of unreality. They have no rich blood in their veins; and are little better than lay figures taking up positions as it may happen, in order to form an effective tableau illustrative of an unexceptionable moral.

There is, it is true, one remarkable exception to the general weakness of

Massinger's characters. The vigor with which Sir Giles Overreach is set forth has made him the one well-known figure in Massinger's gallery, and the *New Way to Pay Old Debts* showed in consequence more vitality than any of his other plays. Much praise has been given, and rightly enough, to the originality and force of the conception. The conventional miser is elevated into a great man by a kind of inverse heroism, and made terrible instead of contemptible. But it is equally plain that here, too, Massinger fails to project himself fairly into his villain. His rants are singularly forcible, but they are clearly what other people would think about him, not what he would really think, still less what he would say, of himself. Take, for example, the very fine speech in which he replies to the question of the virtuous nobleman, whether he is not frightened by the imprecations of his victims:—

Yes, as rocks are
When foaming billows split themselves against
Their flinty sides; or as the moon is moved
When wolves, with hunger pined, howl at her
brightness.
I am of a solid temper, and, like these,
Steer on a constant course; with mine own
sword,
If called into the field, I can make that right
Which fearful enemies murmur at as wrong.
Now, for those other piddling complaints
Breath'd out in bitterness, as when they call
me
Extortioner, tyrant, cormorant, or intruder
On my poor neighbor's rights, or grand in-
closer
Of what was common to my private use,
Nay when my ears are pierced with widows'
cries,
And undone orphans wash with tears my
threshold,
I only think what 'tis to have my daughter
Right honorable; and 'tis a powerful charm
Makes me insensible to remorse or pity,
Or the least sting of conscience.

Put this into the third person; read "he" for "I," and "his" for "my," and it is an admirable bit of denunciation of a character probably intended as a copy from life. It is a description of a wicked man from outside; and wickedness seen from outside is generally unreasonable and preposterous. When it is converted, by simple alteration of pronouns, into the villain's own account of himself, the internal logic which serves as a pretext disappears, and he becomes a mere monster. It is for this reason that, as

Hazlitt says, Massinger's villains—and he was probably thinking especially of Overreach and Luke in *A City Madam*—appear like drunkards or madmen. His plays are apt to be a continuous declamation, cut up into fragments, and assigned to the different actors; and the essential unfitness of such a method to dramatic requirements needs no elaborate demonstration. The villains will have to denounce themselves, and will be ready to undergo conversion at a moment's notice in order to spout openly on behalf of virtue as vigorously as they have spouted in transparent disguise on behalf of vice.

There is another consequence of Massinger's romantic tendency, which is more pleasing. The chivalrous ideal of morality involves a reverence for women, which may be exaggerated or affected, but which has at least a genuine element in it. The women on the earlier stage have comparatively a bad time of it amongst their energetic companions. Shakespeare's women are undoubtedly most admirable and lovable creatures; but they are content to take a subordinate part, and their highest virtue generally includes entire submission to the will of their lords and masters. Some, indeed, have an abundant share of the masculine temperament, like Cleopatra or Lady Macbeth; but then they are by no means model characters. Iago's description of the model woman is a cynical version of the true Shakespearian theory. Women's true sphere, according to him, or according to the modern slang, is domestic life; and, if circumstances force a Cordelia, an Imogen, a Rosalind, or a Viola, to take a more active share in life, they take good care to let us know that they have a woman's heart under their male dress. The weaker characters in Massinger give a higher place to women, and justify it by a sentiment of chivalrous devotion. The excess, indeed, of such submissiveness is often satirised. In the *Roman Actor*, the *Emperor of the East*, the *Duke of Milan*, the *Picture*, and elsewhere, we have various phases of uxorious weakness, which suggest possible application to the Court of Charles I. Elsewhere, as in the *Maid of Honor* and the *Bashful Lover*, we are called upon to sympathise with manifestations of a highflown devotion to

feminine excellence. Thus, the bashful lover, who is the hero of one of his characteristic dramatic romances, is a gentleman who thinks himself scarcely worthy to touch his mistress's shoestring. On the sight of her he exclaims—

As Moors salute
The rising sun with joyful superstition,
I could fall down and worship.—O my heart!
Like Phœbe breaking through an envious
cloud,

Or something which no simile can express,
She shows to me; a reverent fear, but blended
With wonder and astonishment, does possess
me.

When she condescends to speak to him, the utmost that he dares to ask is liberty to look at her, and he protests that he would never aspire to any higher privilege. It is gratifying to add that he follows her through many startling vicissitudes of fortunes in a spirit worthy of this exordium, and of course is finally persuaded that he may allow himself a nearer approach to his goddess. The Maid of Honor has two lovers, who accept a rather similar position. One of them is unlucky enough to be always making mischief by well-meant efforts to forward her interest. He, poor man, is rather ignominiously paid off in downright cash at the end of the piece. His more favored rival listens to the offers of a rival duchess, and ends by falling between two stools. He resigns himself to the career of a Knight of Malta, whilst the Maid of Honor herself retires into a convent. Mr. Gardiner compares this catastrophe unfavorably with that of *Measure for Measure*, and holds that it is better for a lady to marry a duke than to give up the world as, on the whole, a bad business. If, however, Isabella is better provided for by Shakespeare than Camiola, "The Maid of Honor," by Massinger, we must surely agree that the Maid of Honor has the advantage of poor Mariana, whose reunion with her hypocritical husband certainly strikes one as a questionable advantage. Her fate seems to intimate that marriage with a hypocritical tyrant ought to be regarded as better than no marriage at all. Massinger's solution is at any rate in harmony with the general tone of chivalrous sentiment. A woman who has been placed upon a pinnacle by overstrained devotion cannot, consistently with her dignity, console herself like an ordinary

creature of flesh and blood. When her worshippers turn unfaithful she must not look out for others. She may permit herself for once to return the affection of a worthy lover; but, when he fails, she must not condescend again to love. That would be to admit that love was a necessity of her life, not a special act of favor for some exceptional proofs of worthiness. Given the general tone of sentiment, I confess that, to my taste, Massinger's solution has the merit, not only of originality, but of harmony. It may, of course, be held that a jilted lady should, in a perfect healthy state of society, have some other alternative besides a convent or an unworthy marriage. Some people, for example, may hold that she should be able to take to active life as a lawyer or a professor of medicine; or they may hold that love ought not to hold so prominent a part even in a woman's life, that disappointed passion should involve, as a necessary consequence, the entire abandonment of the world. But, taking the romantic point of view, of which it is the very essence to set an extravagant value upon love, and remembering that Massinger had not heard of modern doctrines of woman's rights, one must admit, I think, that he really shows, by the best means in his power, a strong sense of the dignity of womanhood, and that his catastrophe is more satisfactory than the violent death or the consignment to an inferior lover which would have commended themselves to most Elizabethan dramatists.

The same vein of chivalrous sentiment gives a fine tone to some of Massinger's other plays; to the *Bondman*, for example, and the *Great Duke of Florence*, in both of which the treatment of lover's devotion shows a higher sense of the virtue of feminine dignity and purity than is common in the contemporary stage. There is, of course, a want of reality, an admission of extravagant motives, and an absence of dramatic concentration, which indicate an absence of high imaginative power. Chivalry, at its best, is not very reconcilable with common sense; and the ideal hero is divided, as Cervantes shows, by very narrow distinctions from the downright madman. What was absurd in the more vigorous manifestations of the spirit does not vanish when its energy is lowered, and the

rhetician takes the place of the poet. But the sentiment is still genuine, and often gives real dignity to Massinger's eloquent speeches. It is true that, in apparent inconsistency with this excellence, passages of Massinger are even more deeply stained than usual with revolting impurities. Not only are his bad men and women apt to be offensive beyond all bearable limits, but places might be pointed out in which even his virtuous women indulge in language of the indescribable variety. The inconsistency of course admits of an easy explanation. Chivalrous sentiment by no means involves perfect purity, nor even a lofty conception of the true meaning of purity. Even a strong religious feeling of a certain kind is quite compatible with considerable laxity in this respect. Charles I. was a virtuous monarch, according to the admission of his enemies; but, as Kingsley remarks, he suggested a plot to Shirley which would certainly not be consistent with the most lax modern notions of decency. The court of which he was the centre certainly included a good many persons who might have at once dictated Massinger's most dignified sentiments and enjoyed his worst ribaldry. Such, for example, if Clarendon's character of him be accurate, would have been the supposed "W. H.," the eldest of the two Earls of Pembroke, with whose family Massinger was so closely connected. But it is only right to add that Massinger's errors in this kind are superficial, and might generally be removed without injury to the structure of his plays.

I have said enough to suggest the general nature of the answer which would have to be made to the problem with which I started. Beyond all doubt, it would be simply preposterous to put down Massinger as a simple product of corruption. He does not mock at generous, lofty instincts, or overlook their influence as great social forces. Mr Ward quotes him as an instance of the connection between poetic and moral excellence. The dramatic effectiveness of his plays is founded upon the dignity of his moral sentiment; and we may recognise in him "a man who firmly believes in the eternal difference between right and wrong." I subscribe most willingly to the truth of Mr. Ward's general princi-

ple, and, with a certain reservation, to the correctness of this special illustration. But the reservation is an important one. After all, can anybody say honestly that he is braced and invigorated by reading Massinger's plays? Does he perceive any touch of what we feel when we have been in company, say, with Sir Walter Scott; a sense that our intellectual atmosphere is clearer than usual, and that we recognise more plainly than we are apt to do the surpassing value of manliness, honesty, and pure domestic affection? Is there not rather a sense that we have been all the time in an unnatural region, where, it is true, a sense of honor and other good qualities come in for much eloquent praise, but where, above everything, there is a marked absence of downright wholesome common sense? Of course the effect is partly due to the region in which the old dramatists generally sought for their tragic situations. We are never quite at home in this fictitious cloudland, where the springs of action are strange, unaccountable, and altogether different from those with which we have to do in the work-a-day world. A great poet, indeed, weaves a magic mirror out of these dream-like materials, in which he shows us the great passions, love, and jealousy, and ambition, reflected upon a gigantic scale. But, in weaker hands, the characters become eccentric instead of typical: his vision simply distorts instead of magnifying the fundamental truths of human nature. The liberty which could be used by Shakespeare becomes dangerous for his successors. Instead of a legitimate idealisation, we have simply an abandonment of any basis in reality.

The admission that Massinger is moral must therefore be qualified by the statement that he is unnatural; or, in other words, that his morality is morbid. The groundwork of all the virtues, we are sometimes told, is strength and manliness. A strong nature may be wicked, but a weak one cannot attain any high moral level. The correlative doctrine in literature is, that the foundation of all excellence, artistic or moral, is a vivid perception of realities and a masculine grasp of facts. A man who has that essential quality will not blink the truths which we see illustrated every day around us. He will not represent vice

as so ugly that it can have no charms, so foolish that it can never be plausible, or so unlucky that it can never be triumphant. The robust moralist admits that vice is often pleasant, and that wicked men flourish like a green bay tree. He cannot be over-anxious to preach, for he feels that the intrinsic charm of high qualities can dispense with any artificial attempts to bolster them up by sham rhetoric, or to slur over the hard facts of life. He will describe Iago as impartially as Desdemona; and, having given us the facts, leave us to make what we please of them. It is the mark of a more sickly type of morality, that it must always be distorting the plain truth. It becomes sentimental, because it wishes to believe that what is pleasant must be true. It makes villains condemn themselves, because such a practice would save so much trouble to judges and moralists. Not appreciating the full force of passions, it allows the existence of grotesque and eccentric motives. It fancies that a little rhetoric will change the heart as well as the passing mood, and represents the claims of virtue as perceptible on the most superficial examination. The morality which requires such concessions becomes necessarily effeminate; it is unconsciously giving up its strongest position by implicitly admitting that the world in which virtue is possible is a very different one from our own.

The decline of the great poetic impulse does not yet reveal itself by sheer blindness to moral distinctions, or downright subservience to vice. A lowered vitality does not necessarily imply disease, though it is favorable to the development of vicious germs. The morality which flourishes in an exhausted soil is not a plant of hardy growth and tough fibre, nourished by rough common sense, flourishing amongst the fierce contests of vigorous passions, and delighting in the open air and the broad daylight. It loves the twilight of romance, and creates heroes impulsive, eccentric, extravagant in their resolves, servile in their devotion, and whose very natures are more or less allied to weakness and luxurious self-indulgence. Massinger, indeed, depicts with much sympathy the virtues of the martyr and the penitent; he can illustrate the paradox that strength can

be conquered by weakness, and violence by resignation. His good women triumph by softening the hearts of their persecutors. Their purity is more attractive than the passions of their rivals. His deserted King shows himself worthy of more loyalty than his triumphant persecutors. His Roman actor atones for his weakness by voluntarily taking part in his own punishment.

Such passive virtues are undoubtedly most praiseworthy; but they may border upon qualities not quite so praiseworthy. It is a melancholy truth that your martyr is apt to be a little sanctimonious, and that a penitent is sometimes a bit of a sneak. Resignation and self-restraint are admirable qualities, but admirable in proportion to the force of the opposing temptation. The strong man curbing his passions, the weak woman finding strength in patient suffering, are deserving of our deepest admiration; but in Massinger we feel that the triumph of virtue implies rather a want of passion than a power of commanding it, and that resignation is comparatively easy when it connotes an absence of active force. The general lowering of vitality, the want of rigid dramatic coloring, deprive his martyrs of that background of vigorous reality against which their virtues would be forcibly revealed. His pathos is not vivid and penetrating. Truly pathetic power is produced only when we see that it is a sentiment wrung from a powerful intellect by keen sympathy with the wrongs of life. We are affected by the tears of a strong man; but the popular preacher who enjoys weeping produces in us nothing but contempt. Massinger's heroes and heroines have not, we may say, backbone enough in them to make us care very deeply for their sorrows. And they moralise rather too freely. We do not want sermons, but sympathy, when we are in our deepest grief; and we do not feel that anyone feels very keenly who can take his sorrows for a text, and preach in his agony upon the vanity of human wishes or the excellence of resignation.

Massinger's remarkable flow of genuine eloquence, his real dignity of sentiment, his sympathy for virtuous motive, entitle him to respect; but we cannot be blind to the defect which keeps his work below the level of his greatest con-

temporaries. It is, in one word, a want of vital force. His writing is pitched in too low a key. He is not invigorating, stimulating, capable of fascinating us by the intensity of his conceptions. His highest range is a dignified melancholy or a certain chivalrous recognition of the noble side of human nature. The art which he represents is still a genuine and spontaneous growth instead of an artificial manufacture. He is not a mere professor of deportment, or maker of fine phrases. The days of mere affectation have not yet arrived; but, on the other hand, there is an absence of that grand vehemence of soul which breathes in the spontaneous, if too lawless, vigor of the older race. There is something hollow

under all this stately rhetoric; there are none of those vivid phases which reveal minds moved by strong passions and excited by new aspects of the world. The sails of his verse are not, in Chapman's phrase, "filled with a lusty wind," but moving at best before a steady breath of romantic sentiment, and sometimes flapping rather ominously for want of true impulse. High thinking may still be there, but it is a little self-conscious, and in need of artificial stimulant. The old strenuous line has disappeared, or gone elsewhere—perhaps to excite a Puritan imagination, and create another incarnation of the old type of masculine vigor in the hero of *Paradise Lost*.—*Cornhill Magazine*.

LOCH CARRON, WESTERN HIGHLANDS.

A BLACK and glassy float, opaque and still,
The loch, at farthest ebb supine in sleep,
Reversing, mirrored in its luminous deep,
The quiet skies; the solemn spurs of hill,

Brown heather, yellow corn, gray wisps of haze;
The white low cots, black windowed, plumed with smoke;
The trees beyond. And when the ripple awoke,
They wavered with the jarred and wavering glaze.

The air was dim and dreamy. Evermore
A sound of hidden waters whispered near.
A straggler crow cawed high and thin. A bird

Chirped from the birch-leaves. Round the shingled shore,
Yellow with weed, came wandering, vague and clear,
Mysterious vowels and gutturals, idly heard.

Cornhill Magazine.

ROUND THE WORLD IN A YACHT.

BY THOMAS BRASSEY, M.P.

III.

AT last the hour had come for our departure from Rio. At 6 A.M. on Tuesday, the 5th of September, the 'Sunbeam's' anchors were weighed. As we parted company with our kind friends on board H.M.S. 'Volage' and the gunboat 'Ready,' we exchanged appropriate signals of good wishes for mutual prosperous voyages, of gratitude for kind-

nesses received, and of regret-at parting.

Limits of space forbid that I should enter upon the details of our passage to the River Plate. On the 7th and 8th of September we experienced a severe gale from the north. On the 11th we reached Montevideo, and on the following day we steamed up to Buenos Ayres.

The estuary of the Plate is the embouchure of one vast system of rivers.

The Parana is navigable for a thousand miles, above Buenos Ayres; and the upper Parana is navigable through the interior of Brazil for another thousand miles.

The navigation of the river Plate is difficult. The channels run in a tortuous course between extensive mud flats. They are not buoyed, and are very imperfectly lighted. The currents are rapid and so uncertain as to baffle the prophetic powers of the most experienced pilots. Hence the risk of losing a vessel is considerable, and the actual losses are even more than proportionate to the unavoidable risk incurred. No attempt seems to have been made to organise means for the salvage of vessels, which have been driven on to the banks and shoals. In the present state of the law of insurance every inducement is held out to the owner of a worn-out ship to bring her career to a close on one of the mud-banks in the Plate. There is no ground for apprehension that the distance from the land will be too great, or the sea too tempestuous for a boat to live in it. Thus the crew will be saved, while the sums recoverable from the underwriters will provide the means of replacing a decayed or obsolete ship by the purchase of a new vessel.

I cannot attempt to give a general description of the Argentine Republic. According to the recent report of Consul Cowper it contains upwards of 2,000,000 inhabitants, and its superficial area is estimated at 1,000,000 square miles, situated under every variety of climate. All the productions of the temperate zone are to be found in its central provinces, which enjoy a climate unsurpassed by any region of the globe.

With all the disadvantages of constant political disturbances, and most imperfect security both for person and property, the Argentine Confederation has advanced with marvellous strides. In a speech delivered in 1873 at Buenos Ayres, Dr. Rawson, an ex-minister, pointed out that the foreign commerce of the Republic had advanced from 26,000,000 dollars in 1862, to 80,000,000 in 1872; and that immigration had increased in the corresponding period, from 5,000 to 40,000. In this extensive commerce Great Britain has obtained an important share, as the following figures testify:—

	Imports.	Exports.
Total.....	£13,285,766.....	£9,024,081
Of which		
England.....	3,868,824.....	1,978,861
France.....	3,645,027.....	1,735,563
Belgium.....	593,517.....	2,778,301
United States..	1,033,523.....	606,589

It was one of the principal objects of my visit to this country to examine the colonies established on the line of the Central Argentine Railway. As the son of the senior member of the firm of contractors, by whom it was constructed, I could not but regard that undertaking with peculiar interest. It is described by Messrs. Mulhall, the authors of an excellent Argentine Handbook, as the greatest work ever contemplated in the Republic, and a lasting monument of that distinguished American, the late Mr. Wheelwright, the friend and townsman of Mr. Peabody, by whom the concession was obtained in 1853.

The line of the Central Argentine Company connects Rosario with Cordova, and forms the first section of a railway, which it was proposed by the original projectors to carry across the Andes, and thus establish a continuous line of communication between Valparaiso and the west coast of South America and the River Plate. This extensive plan is gradually being carried into execution. The line to Cordova was last year extended to Tucuman, a distance of 340 miles, and surveys for an extension to Jujuy have already been commenced.

Civil wars intervening, the scheme projected by Mr. Wheelwright lay in abeyance until 1852, when Congress gave a new concession. Interest at 7 per cent. was guaranteed for forty years, on a capital not exceeding 6,400*l.* a mile, and a free grant was made of a league of land on either side of the line. The extent of this grant was no less than 600,000 acres. This territory has since passed into the hands of an association, which has endeavored to introduce Scotch, Swiss, and Italian colonists into the country. Their operations have not been attended with success; and I have been requested to examine into the state of affairs in the colonies, and to advise as to their future management.

The distance from Rosario to Cordova is 247 miles. The country traversed presents few physical features of special

interest. The province of Rosario is a grassy plain. After the boundary between the provinces of Rosario and Cordova is passed, the aspect of the country becomes more arid. There are extensive tracts of deserts, producing only a few stunted bushes. We saw deer and ostriches more than once from the footplate of the engine. A few bands of Indians, not more domesticated in their habits than the indigenous animals, and far more savage and cruel in their nature, roam over these vast wastes, and occasionally attack an isolated estancia.

The native inhabitants are almost exclusively occupied as graziers, whether of sheep or cattle. With the view, however, of attracting a more numerous population, and thus creating a busy traffic on the railway, an attempt was made to introduce arable cultivation on the lands conceded to the Central Argentine Railway Company. For this purpose the land was divided into plots of 80 acres each, and settlers were introduced from Europe. All their expenses were paid by the company, and each was provided with a small hut and a well on his allotment. The first colonies were laid out in the vicinity of the stations nearest the Rosario Terminus. Five of these colonies have been formed, with a total population of 4,524 Europeans and 1,000 native settlers. The largest of these is Roldan, with a population of 2,369. The more fertile lands will produce abundant crops of wheat for four years in succession, without manure, or a rotation of green crops. A station master on the line rents 3,000 acres of land, of which 1,000 acres were sown with wheat. In 1875 he raised six bushels of wheat per acre, at a cost of 11s., the selling price being 22s. The unsettled condition of commercial affairs in the Argentine Republic is clearly indicated in the extraordinary fluctuations in the prices of wheat. In Rosario, in 1876, the highest price was 52s. the bushel. This lasted for a very short time only. The price then fell to about 25s., at which figure it stood for more than six months. These oscillations are a great drawback to farmers, and make it almost impossible for them to borrow capital for agricultural operations.

As a rule a crop of nine bushels of wheat per acre pays well. Twenty

bushels, however, are often grown. Consul Joel, in his report for 1875, quotes a case that had come under his own observation in Roldan, one of our colonies, where a colonist sowed 6½ bushels on 8½ acres, and cropped 360 bushels, which was over 40 bushels to the acre. The seed was white wheat, which is used exclusively in this country for the manufacture of macaroni. The average yield of the colonies in 1875 was 12½ bushels per acre.

It will be evident from these figures that arable cultivation would yield a highly satisfactory return, but for the frequent invasion of the locusts. Their periodical visits are a most grievous scourge. They destroy, in a few hours, crops, orchards, and vegetation of all kinds. While riding over Messrs. Hope's farm, we saw 1,000 acres of wheat which was just beginning to shoot, in the very process of being eaten up. The locusts were so numerous that they both darkened the air, and covered the earth with a swarm so dense, that the blades of corn were only just visible here and there. A horse walking through the wheat caused them to rise in myriads. It was possible that the wheat might partially recover, provided there were abundant rains after the locusts had departed, but even then they might reappear and resume the work of destruction. It will be evident that the locust in South America rivals the Colorado beetle in ominous and surprising capability for doing evil. The periodical recurrence of this terrible scourge makes it impossible for the farmer in these countries to rely on tillage alone. Tillage must be combined with pasture. The experience of the natives, who are the most successful settlers, has taught them this lesson. On the four leagues adjacent to Rosario, reserved by the Government from expropriation, and occupied exclusively by the natives, there is no tillage, but vast herds of cattle and large flocks of sheep are reared, and render an ample return to the estancieros.

In riding through the colonies a conspicuous difference is apparent between the condition of the individual colonists. Two men will be found, living side by side, who commenced colonial life under precisely equal conditions, having no capital, but with 80 acres of land assigned to

them for cultivation. Of these the one is prosperous, the owner of the land he uses, and free from debt to the company. His neighbor will have paid neither principal nor interest on the purchase-money of his land, he will have done nothing to reduce his indebtedness for money advanced to him, and at the same time be living in a state of semi-starvation and misery. In such cases, and they are common, you generally discover an obvious explanation in the bright intelligent countenance of the one, and the dull heavy look of the other. Yet there are doubtless numerous instances of undeserved misfortunes.

The most unhappy of the colonies established on the line of the Central Argentine Railway, is situated at a station called Tortugas. For three years in succession the crops have been destroyed by locusts, drought, and hailstones. The drought is a misfortune peculiar to this colony. The other drawbacks are felt more or less in every part of the Argentine Confederacy. I conversed at length, with the manager, on the condition and prospects of the people under his charge. Unless their crop, which has already been devoured by locusts, recovered, their situation would be utterly hopeless. I very strongly urged the necessity of removing a portion of the colonists into a more favorable district, should the coming harvest again prove a failure. Nothing will be sacrificed by the adoption of such a course. The colonists have brought 2000 squares (each of 4½ acres in extent) under cultivation, and the valuation of the cultivation was formerly estimated at 10s. a square. But the colonists themselves are now so thoroughly disheartened, that they would willingly leave their present lands without compensation, if they were to receive an allotment of an equal area of untilled land in a more promising situation. Their dwellings being built of clods of earth, or dried bricks, have no value, except for the roof and tiles, and the latter could be taken down and carted to another site. The removal would not involve the company in any expense, as the settlers would be prepared to convey their scanty possessions in their own carts to their new allotments.

Having briefly described the actual condition of the colonies, I turn to the

policy to be adopted in the management of these estates in the future. The grave error of introducing emigrants from Europe at the expense of the company is not likely to be repeated. The special case of the colonists at Tortugas excepted, no further expenditure should be incurred, whether in giving aid to those already settled on our lands, or in attracting new settlers.

The natives, and foreigners, who have already had experience in this country, succeed best, and are the most regular in their payments. The policy of the company is to sit still, and to be prepared to negotiate sales with all comers, who can show that they possess sufficient resources to justify them in making an agreement to purchase land. There will be no lack of suitable settlers. Italian Protestants have of late been removing from the north to settle on our land. These men are thrifty, industrious, and acquainted with the most effective methods of tilling land in these countries.

It has already been stated that the concession of land from the Government to the Railway Company formed a vast territory of no less than 146 square leagues. Its value, however, is but small, and the prices, low as they are, which may ultimately be expected, can only be realised in a long lapse of time. I give the figures as an indication of the wild character of the country in the South American republics.

Forty-two leagues of the concession are situated within the province of Santa Fé, of which Rosario is the capital. The value of these lands is 6,000*l.* a league. Ten leagues of marshy land in the same province are worth 3,000*l.* a league. Ninety-four leagues are in the province of Cordova. The district is an uninhabited desert, and the value of the land does not exceed 500*l.* a square league.

I quitted the colonies of the Central Argentine Land Company profoundly impressed with the conviction that all attempts to stimulate emigration artificially are full of hazard.

Starting on the 22nd of September we made an interesting excursion into the province of Buenos Ayres. Proceeding twenty miles by railway and ten miles in carriages over the pampas, we reached a large farm, belonging to one of the principal tramway companies of the city.

The farm is 2,500 acres in extent, and consists of good pasture land, watered by a brimming brook. It was purchased a few years ago for 8,000*l.*, and no less than 24,000*l.* has been offered for the property within the last six months. A hundred men are here employed as horsekeepers, and in gathering in the hay and green crops required for a stud of 800 horses. The wages of the farm laborers, or peons, are 2*l.* a month. They are lodged and found at an additional cost of thirty shillings a month.

Lucerne is the most advantageous food for cattle in this country. Five crops are obtained every year. Of maize the return is ample. Oats are a failure: nothing but straw is produced. 'Wheat,' says Sir Woodbine Parish, 'requires the cooler climate of the southern part of the provinces.' Flax and hemp have been tried with success. The vine, the orange, the fig, and the peach flourish luxuriantly, especially the latter. The price of lean stock is about thirty shillings a head. When fatted, which takes about three months on good land, the same cattle will fetch 4*l.* a head. Horses not broken can be bought for 3*l.*, and will generally stand regular work in the tramway cars for a period of five years. Cattle for forming herds are obtainable at from 18*s.* to 20*s.* per head.

From the tramway farm we drove to the estancia of Mr. B—, and on the following morning I rode round his farm. It contains 25,000 sheep, which are fed on 3,820 squares of land, each of 4½ acres in extent. In the province of Buenos Ayres it is commonly estimated that from 20,000 to 17,000 sheep can be fed on a league of superior land. If this assumption can be justified by experience, land in the Argentine Confederation will carry more sheep than an equal area in Australia. Here three sheep can be fed on one acre. In Australia three acres are required to feed one sheep. In the Argentine Confederation wool can be produced for 4*d.* per pound. In Australia unwashed wool could not be produced under 9*d.* per pound. The Australian wool is now nearly as burry as the Argentine, but the former has a superior staple. In the Argentine Confederation a flock of 2,000 sheep should produce 400 arrobas of wool, an arroba weighing 25½ pounds avoirdupois.

The arroba should sell for 75 dollars; and taking off 10 dollars for the expenses of shearing, baling, and other charges, there remains a profit of 65 dollars a ton, or 11*s.* per arroba, or a total return of 220*l.* from each flock of 2,000 sheep. The positive expenses for the maintenance of such a flock, including the rent of land and the wages of the shepherd, are from 120*l.* to 150*l.* a year. The wool alone should pay all the expenses of the Argentine sheep-owner, and a profit of 5 per cent. on the capital embarked. The tallow and the new stock are a clear additional profit. In good years, the profits realised in this country are much larger than in Australia. On the other hand the risks from drought are greater. The calculations I have given are based on statements furnished to me by gentlemen of long experience, who have had many opportunities of comparing their results with those obtained in Australia. It is, however, possible that an Australian sheep-farmer might be disposed to modify the figures in favor of his own country.

The same subject was ably discussed by Mr. Macdonnell in the report, which he wrote when *Chargé d'Affaires* at Buenos Ayres. He does not advise emigrants to come to the River Plate with the view of engaging in agriculture; for though the soil, consisting of marine and alluvial deposit, is remarkably fertile, yet there are numerous obstacles to successful cultivation, 'including sudden changes of temperature, violent storms of wind, dust, and rain, long-continued droughts, heavy and persistent rains, locusts, bichos, basket-worms, and ants.'

Mr. Macdonnell recommends sheep-farming as the most lucrative occupation in which British settlers can engage. Cattle-farming is mostly in the hands of natives, many of whom have made large fortunes. Herds of cattle require extensive pastures, and can be kept most advantageously in the outlying provinces, where land is cheap. For sheep a less extent of land is necessary, but it should be of superior quality.

The natural grasses of Buenos Ayres possess admirable fattening qualities, and the flocks produce a description of wool especially adapted for fine kersey cloths, and extensively consumed in France and Belgium. The yarn spun from it in the

latter country is in great demand in Scotland and the north of Germany.

The increase in the export of wool is remarkable. While 42,275 bales were exported in 1860, there were exported in 1870 of wool 100,369 bales, of the value of 2,195,119*l.*, and upwards of 57,000,000 pounds of sheepskins.

Mr. St. John, the successor of Mr. Macdonnell, in his report for 1875, speaks of wool as by far the most important product of the country. The amount in English pounds exported in 1873 was 156,781,756, on which the official valuation was 3,416,156*l.*, making the bale of 800 English pounds to be worth 17*l.* 8*s.* 7½*d.* In the following year the same authority gives the value of the wool exported at 3,592,629*l.*, distributed as follows :—

Belgium.....	£2,242,536
France.....	223,485
England.....	213,432

The Argentine Republic is the favorite field for Italian emigration. Italy supplies more than half the number of emigrants who land on these shores, and the influx has not hitherto been checked by the strong prejudices, with which they are regarded by the authorities and by the whole native population. The Italians settle almost exclusively in the towns, and from this circumstance they are acquiring by the mere force of numbers a political influence in Buenos Ayres, which the Argentines view with bitter jealousy.

The Italians come here almost exclusively in the hope of amassing such a competency as may enable them to end their days in their native land in comparative comfort, if not in affluence. Of the 140,000 or 150,000 Italians who have landed in this Republic since 1862, one-third at least have returned home. The Italians cannot therefore be esteemed a valuable addition to the population of the Republic. They seldom have sufficient enterprise to leave the towns and bring new districts under cultivation. The great body of the emigrants to the United States are men of a very different stamp. They come almost exclusively from Germany and Great Britain. According to official data, says Mr. Macdonnell, '400,000 immigrants land yearly in the United

States; of these seventy-five per cent proceed immediately to the interior. Here, however, during the year 1870, out of upwards of 40,000 immigrants, not more than 1,000 proceeded to the interior provinces.'

The difference between the United States and the Argentine Republic is, that in one case the immigrant is a producer, in the other a consumer. Eighty-nine per cent. of the Anglo-German immigrants who land in New York are agriculturists; the arrivals from the south of Europe scarcely exceeding 3,000.

The statistics of population afford conclusive evidence of the non-agricultural tendency of the Argentine immigrants. Out of a population of 1,736,901, 1,114,160 are disseminated over 500,000 square miles, or barely two inhabitants per square mile. On the other hand, the density of population in the city of Buenos Ayres is 40,000 per square mile, or one-third more than that of London. The immigrants from Italy remain for the most part in the capital.

Like the Brazilian Government, the authorities of Buenos Ayres have made some abortive efforts to establish State colonies in the Republic. A wiser policy has been adopted in the United States. The action of their government has been limited to the enactment in 1862 of the liberal homestead law, which has attracted emigrants to the States in numbers, increasing rapidly from 76,396 in 1861, to 156,844 in 1862, and 258,989 in 1869. In the Argentine Republic the principle of free gifts of land has not as yet been accepted. The land law, passed at Buenos Ayres in 1871, contains provisions for the sale of the frontier lands in lots of eight square leagues, or 13,300 acres, at prices equal to 1*s.* 9*d.* per statute acre, payable one tenth in cash, and the remainder in eight yearly instalments.

The experience of public and private efforts to foster emigration by artificial means has been equally discouraging in Brazil and the Argentine Republic. It must be the same in all descriptions of enterprise, where success can only be achieved by much toil and acute intelligence, stimulated to the highest degree by the prospect of adequate reward for exertion, and by the conviction that there will be none to share or to mitigate the consequences of indolence or inca-

capacity. It is by technical knowledge in one case, in another by close attention to detail, in another by a wise choice of agents, that success in business can be attained. In administrative enterprise, whether in the sphere of commerce or agriculture, State interference and corporate management are equally inappropriate.

'It is,' says Mr. Burke, 'one of the finest problems in legislation, and what has often engaged my thoughts whilst I followed that profession, what the State ought to take upon itself to direct by the public wisdom, and what it ought to leave with as little interference as possible to individual discretion. Nothing, certainly, can be laid down on the subject that will not admit of exceptions, many permanent, some occasional. But the clearest line of distinction which I could draw, whilst I had my chalk to draw any outline, was this: that the State ought to confine itself to what regards the State, or the creatures of the State; namely, the exterior establishment of its religion, its magistracy, its revenue, its military force by sea and land, the corporations that owe their existence to its fiat; in a word, to everything that is truly and properly public—to the public peace, to the public safety, to the public order, to the public prosperity. Statesmen who know themselves well, with the dignity which belongs to wisdom, proceed only in this superior orb and first mover of their duty, steadily, vigilantly, severely, courageously: whatever remains will, in a manner, provide for itself. But as they descend from a state to a province, from a province to a parish, and from a parish to a private house, they go on accelerated in their fall. They cannot do the lower duty, and, in proportion as they try it, they will certainly fail in the higher.'

I conclude this account of our visit to the Argentine Republic with some extracts from my Journal describing a journey towards the southern frontier of the Confederation.

We started on the 24th of September; and as our disembarkation from the 'Sunbeam' was the only serious nautical adventure of the whole voyage, it shall be described circumstantially. We had remained on board until 4 P.M. The weather throughout the day was

boisterous, the wind gradually increasing until it blew a hard gale from the south-east. As a seaport, Buenos Ayres is by no means advantageously situated. An extensive shoal in front of the town makes it necessary for vessels, drawing thirteen feet, to anchor at a distance of six miles from the shore; and the anchorage is exposed to winds from every quarter, except the west. Hence, whenever strong winds are experienced, and they prevail during the greater part of the year, communication with the shore becomes always disagreeable, often difficult, and sometimes impracticable.

The exigencies of this seaport have produced a special class of decked whale boats, which sail admirably, and are good sea boats. These useful craft are generally employed to communicate with ships in the outer roadstead. It was in one of these whale boats that we landed from the 'Sunbeam,' not without difficulty, this afternoon. We made a rapid passage, scudding before the wind from the outer to the inner roadstead; but as we approached the shore it was evident that the operation of landing would be far from easy. A long pier has been built on iron piles. We made for the end of this pier, but we missed it, and were obliged to anchor, in order to avoid being driven into the broken waters under our lee, which were too shallow even for our whale boat. In ordinary weather passengers are landed without difficulty in small skiffs. Two men put off in one of these boats, to convey us to the shore, and after a hard struggle, though the distance did not exceed 200 yards, they reached the whale boat. I jumped into the skiff, with my two little girls and two maid-servants. We had a hazardous pull through the broken surf to the landing-place. Once, when the crest of a short wave broke into the boat, the boatmen seemed on the point of giving up the attempt to reach the pier; but when I seized an oar, and began to pull myself, they resumed their task with redoubled efforts. Example always has a stimulating effect. Its beneficial influence was felt in the present case, and in a few minutes more our little party, though drenched to the skin, was safely landed. I made two more trips in the same boat, the crew being reinforced with a third oarsman. I was truly thankful when all

the members of our party were safely brought to land.

After dining at the excellent *Hôtel de la Paix*, we started, at 10 P.M. in a special train for Azul, the terminus of the Southern Railway. We reached our destination at 6 A.M. Azul is on the southern frontier of the province of Buenos Ayres, and distant about 200 miles from the capital. Until a recent period it was often threatened by the Indians, who are only kept at bay at the present time by the military force stationed here, under Colonel Donovan. One-third of the inhabitants are tame Indians. We visited the residence of one of their chiefs. It consists of a mud hut, in a large enclosure formed by mud walls. In the open air, in a corner of the yard, there was a fire, round which the family of the chieftain, consisting of three women and three children, were crouching. They sat motionless, while we gazed at their not unpleasant countenances, which much resemble those of the Indians of North America. They have sharp features, high cheek-bones, dark hair, a yellow complexion, and handsome eyes. When the regular troops go forth to attack the savage tribes, they are accompanied by the same Indians, who act as skirmishers and scouts. Our host was invited to show us what he could do with the bolas; but his hand had lost its cunning, and his performance was not wonderful.

The sights of Azul having been exhausted, we drove to a large estancia, about four miles from the town, the property of Mr. Frere, a German settler. This gentleman is the proprietor of 36 square miles of land, and the owner of 50,000 sheep, 2,000 head of cattle, and 400 horses. For our entertainment and instruction in the habits and customs of the pampas, Mr. Frere had kindly ordered a troop of horses to be driven into his corral. Here, for the first time, we saw the lazo used, and an untamed horse ridden by a domidor.

For a description of the lazo, I shall refer to the pages of Mr. Darwin: 'The lazo consists of a very strong, but thin, well-plaited rope made of raw hide. One end is attached to the broad surcingle, which fastens together the complicated gear of the recado, or saddle used in the pampas; the other is termi-

nated by a small ring of iron or brass, by which a noose can be formed. The gaucho, when he is going to use the lazo, keeps a small coil in his bridle-hand, and in the other holds the running noose, which is made very large, generally having a diameter of about eight feet. This he whirls round his head, and by a dexterous movement of his wrist keeps the noose open; then, throwing it, he causes it to fall on any particular spot he chooses.'

The horses having been brought together, as I have said, into the corral, were driven round the enclosure at full gallop. Six gauchos, armed with the lazo, then entered the ring, and, singling out a mare or a foal, threw their lazoes at the animal in such a manner as to catch both the front legs. The horse being caught by the fore legs falls over on the shoulder with a heavy thud, and must often receive a serious if not a permanent injury. The gaucho, holding the legs firmly, proceeds to make a circle round the fallen animal. He gradually succeeds in catching one of the hind legs, draws it close to the fore legs, and so binds the three together. After this the horse is powerless. After witnessing for some time the dexterity with which the lazo can be used, the stallion which had been herded with the troop of mares was singled out and captured. He had never been ridden before; and we were now to see an exhibition of the rare skill and courage in the saddle, for which the gaucho horsemen are famous.

The horse, having been thrown by means of the lazo, as it has already been explained, the process of saddling and bridling shall be described in the graphic and accurate language of Mr. Darwin: 'The gaucho, sitting on the horse's neck, fixes a strong bridle, without a bit, to the lower jaw: this he does by passing a narrow thong through the eye-holes at the end of the reins, and several times round both jaw and tongue. The two front legs are now tied closely together with a strong leather thong, fastened by a slip knot. The lazo, which bound the three together, being then loosed, the horse rises with difficulty. The gaucho, now holding fast the bridle fixed to the lower jaw, leads the horse outside the corral. If a second man is present (otherwise the trouble is much

greater), he holds the animal's head, whilst the first puts on the horse-cloths. When the saddling is finished, the animal is, from fear and the previous exertion, white with foam and sweat.'

The process, as described by Mr. Darwin, was closely followed in the present instance. A sheepskin, however, was substituted for a saddle, and the domidor, or horse-breaker, only used the stirrup to mount his horse. Before he was saddled the horse made tremendous struggles to get free, but a powerful and active gaucho, arrayed in a red shirt, black riding-boots—his long black hair streaming in the wind—altogether a most striking and picturesque personage, held him firmly with the halter, and by the exertion of great muscular strength was enabled to resist the struggler. At length the domidor mounted his hitherto unriden charger. The lazo was cast loose from the fore legs, and the animal, pursued by a gaucho on horseback, who plied him sharply with the whip, and harassed by a troop of dogs, barking furiously at his heels, was free to do his utmost to throw his rider. The great object was to keep the horse in constant and rapid movement. While at a hard gallop, the horse could neither kick nor plunge in such a manner as to disturb the equilibrium of an accomplished horseman; but when, as it happened from time to time, the horse stopped abruptly, arched his back, threw his head down, and then made a great buck jump, executing, in a strange way, a figure of ∞ in mid air, alighting on his fore legs, and with his hind legs kicking desperately, it required horsemanship and muscular power of no ordinary kind on the part of his rider to keep his seat unshaken. The domidor scarcely touched the bridle; but he clasped the horse with a grip of iron, his knees were buried deep in the sheepskin saddle, and his bare heels were fixed as firmly as with a vice under the horse's belly. After many a desperate rush, many a vehement struggle, and many furious gallops to and fro, guided in his mad erratic course by the lash of his rider, and the attendant gaucho, the wild horse was brought back to the corral, exhausted, and for the moment subdued by the power of his rider and his own unaccustomed efforts. After wit-

nessing this most remarkable feat of horsemanship, we bade farewell to our host, and returned to the railway, escorted by Colonel Donovan. We owe much to his kindness in preparing for our visit.

In our walks with the Colonel this morning, we heard many interesting narratives of warfare with the wild Indians. These naked horsemen of the pampas fight bravely, but they cannot resist the Remington breech-loading rifle. When the regular troops advance to the attack, the Indians rarely make a stand. Nevertheless, within the last twelve months, Colonel Donovan has fought four engagements with bands of marauders, and on a recent occasion rescued 30,000 head of cattle, which had been stolen. The Indians sell all the cattle to the Chilians. They have therefore to drive their spoil for a great distance, and, unless their operations were conducted on a large scale, they would make but small profit by their hazardous enterprises. At the date of our visit it was in contemplation to advance the Argentine frontier further south, and to defend it by a chain of forts and a deep ditch. According to the statement in the last Presidential message, this plan has been carried out. The new frontier on the south has been formed from Bahia Blanca, on the coast, in 39° S. latitude, to Rio Quinto, in the interior, in 34° S. latitude and 64° W. longitude. Its length is 381 miles, and it is defended by seven principal forts with villages attached, and by 119 block houses and smaller forts. Where the country is most exposed to the incursions of the Indians, a fosse has been dug, 65 miles long, and telegraphic communication has been established for a distance of 200 miles.

It is proposed to fortify a similar frontier line on the west, extending from Rio Quinto to Fort San Rafael in Mendoza. The President speaks of the success of these works with the utmost confidence.

As we travelled on our return journey from Azul, by daylight, we were enabled to see the richness of the pastures of Buenos Ayres. The soil produces luxuriant crops of lucerne. In winter the thistles cover the ground; in some districts, with masses of green leaves. In summer they rise to a height of 12 feet, so that it is impossible to traverse the

pampas, except by the regular tracks. The agricultural statistics of the Argentine Republic are summarised by Consul Cowper in his last report. According to his estimate, there exist in the country 80,000,000 sheep, 15,000,000 horned cattle, and 4,000,000 horses. Their value is estimated at 30,000,000*l*. About 500,000 mares and cows and 12,000,000 sheep are annually slaughtered. The wool, hides, sheepskins, horns, Liebig's extract of meat, and other products exported are valued at 9,000,000*l*.

The value of the hides and skins exported in 1875, according to Mr. St. John, was 1,669,211*l*, of which the United States took 486,582*l*. The export of ox and cow, salted, in the same year was 576,409.

The abundance of horses is shown in the lavish employment of these animals. One at least is provided for every farm laborer. It is no uncommon thing to see six horses yoked in two ranks to a two-wheel cart. 'Even the very beggars,' says Sir Woodbine Parish, 'solicit alms from the saddle.'

If only political tranquillity and personal security could be maintained, an era of material prosperity would be assured to the Argentine Republic. The actual President Avellaneda owes his election to the clerical party, and to the support of the agricultural interest in the provinces of the interior. General Mitre, the leader of the opposition, possesses great influence with the commercial classes, and generally throughout the province of Buenos Ayres. In 1873, at the close of President Sarmiento's term of office, General Mitre placed himself at the head of the revolutionary movement, and declared war against Avellaneda. The facilities at the disposal of the established government for the trans-

port of troops by railway enabled them to suppress the insurrection with unprecedented promptitude. There is reason to hope that, with the extension of the railway system, the central authority will be more and more firmly consolidated, and secured against revolutionary movements.

President Avellaneda is evidently alive to the political difficulties with which he has to contend. He thinks that 'there are no elements for revolution, but a latent alarm which shows our political world out of order.' He has endeavored to conciliate his opponents by granting an unconditional amnesty to all who are in exile for military or political offences connected with the revolution of 1874, and he has announced that appointments in the public service are no longer to be confined to members of his own party. By these means he hopes to avoid the dangers incidental to an oligarchical system, and to put an end to that personal antagonism between rival leaders and their followers in the Senate and the Chamber of Deputies, which is so full of peril to 'democracy and social life.'

Our fellow-countrymen of all classes were prodigal of kindness to us during our stay in the River Plate. Many of those, who are in charge of the Argentine Railway, have held similar positions, as second in command in England. They knew my father well, they liked him much; and clinging, as exiles do, to the ties that bind them to the land which every settler in these countries, of English birth or parentage, calls his Home, they have delighted to testify their regard for a friend they loved in the old country, by lavishing kindnesses on his son and his family.—*The Nineteenth Century*.

METEORITES AND THE ORIGIN OF LIFE.

BY WALTER FLIGHT, D.Sc., F.G.S.

THE question which has so often been raised, How did life originate on our earth? has again been brought before the consideration of the scientific world by Professor Allen Thomson, in the Presidential address delivered at the Plymouth meeting of the British Associ-

ation during the present autumn. One explanation to which he refers is that which formed a prominent feature in the address of a former occupant of the Presidential chair, Sir William Thomson, who six years ago suggested as a possible solution of this great question that

the germs of life might have been borne to our globe by the meteorites which are scattered through space, and which from time to time fall upon the surface of our planet. If, he maintained, we trace back the physical history of our earth, we are brought to a red-hot melted globe on which no life could exist. The earth was first fit for life, and there was no living thing upon it. Can any probable solution, consistent with the ordinary course of nature, be found to explain the problem of its first appearance? When a lava stream flows down the side of Vesuvius or Etna it quickly cools and becomes solid, and after a few weeks or years it teems with vegetable and animal life, which life originated by the transport of seed and ova and by the migration of individual living creatures. When a volcanic island emerges from the sea, and after a few years is clothed with vegetation, we do not hesitate to assume that seed has been wafted to it through the air, or floated to it on rafts. Is it not possible—and if possible, is it not probable—that the beginning of vegetable life on the earth may be similarly explained? Every year thousands, probably millions, of fragments of solid matter fall upon the earth. Whence came they? What is the previous history of any one of them? Was it created in the beginning of time an amorphous mass? The idea is so unacceptable that, tacitly or explicitly, all men discard it. It is often assumed that all, and it is certain that some, meteorites are fragments severed from larger masses and launched free into space. It is as sure that collisions must occur between great masses moving through space as it is that ships, steered without intelligence directed to prevent collisions, could not cross and recross the Atlantic for thousands of years with immunity from such catastrophes. When two great masses come into collision in space it is certain that a large part of each of them is melted; but it appears equally certain that in many cases a large quantity of *débris* must be shot forth in all directions, much of which may have been exposed to no greater violence than individual pieces of rock experience in a landslide or in blasting by gunpowder. Should the time when this earth comes into collision with another body, com-

parable in dimensions to itself, be when it is still clothed, as at present, with vegetation, many great and small fragments carrying seed and living plants and animals would undoubtedly be scattered through space. Hence and because we all confidently believe that there are at present, and have been from time immemorial, many worlds of life besides our own, we must regard it as probable in the highest degree that there are countless seed-bearing meteoric stones moving about through space. If at the present instant no life existed upon this earth, one such stone falling upon it might lead to its becoming covered with vegetation. "I am fully conscious," he concludes, "of the many scientific objections which may be urged against this hypothesis, but I believe them to be all answerable. . . . The hypothesis that life originated on this earth through moss-grown fragments from the ruins of another world may seem wild and visionary; all I maintain is that it is not unscientific." *

Sir William Thomson's views, thus plainly set forth, did not fail to attract adverse criticism. Before we proceed to consider the comments which his hypothesis called forth, we may call the reader's attention for a short time to speculations in the same direction which have appeared in the writings of scientific men in France and Germany.

* First, we must refer to a remarkable passage in the great work of Count A. de Bylandt Palstercamp, on the Theory of Volcanoes.† He wrote in 1835, at a time when Laplace's theory that meteorites were hurled at us from lunar volcanoes was still generally received, and this will account to some extent for the source of the cosmical masses of which he treats. What is mainly worthy of notice is their character, of carriers of the faculty of organization, which he attributes to them. In the chapter intitled "Principe d'après lequel le premier développement de notre globe peut s'être effectué?" he writes: "It may be a matter of curiosity, but it is in nowise necessary, that we should know on what

* "Address of Sir William Thomson, Knt., LL.D., F.R.S., President." London: Taylor and Francis. 1871. P. 27.

† "Théorie des Volcans. Par le Comte A. de Bylandt Palstercamp." Paris: Levraut. 1838. Tome i. p. 95.

principle or from what organized body the great mass of our globe has been derived; it is sufficient for us that we exist in a manner where everything is perfectly organized, at least in so far as the aim of our existence is concerned. Many scientific men have exercised their imagination on this problem without being able to come to any definite decision. Some maintain that the nucleus of our globe was a fragment of a body which in its cosmical path had dashed itself into fragments against the sun, which the very close proximity of some comet to that star gives grounds for believing. Others suppose us to be a vast aerolite thrown off from the sun himself * with a force proportional to its mass, to a zone where the motion is determined in accordance with the laws of reciprocal attraction, and that this fragment carried in itself the germ of all that organization which we see around us, and of which we form a part. (*Que cet éclat portait en lui le germe de toute cette organisation que nous observons ici et dont nous faisons partie.*) They suppose the satellites to be small parts or fragments detached from the chief mass by the violence of the rotation at the time it is hurled forth, or by the excessively high original temperature, increased by the fall, which produced a very violent dilatation of the matter, and severed some portions from it. These aerolites, it is said, by way of comparison, contain within them the principle common to the body whence they have been derived, just as a grain of seed carried by the wind is able to produce at a remote distance a tree like its prototype, with such modifications only as are due to soil or climate."

In the spring of 1871 Professor Helmholtz delivered at Heidelberg and at Cologne a discourse on the origin of the solar system, which he printed in the third collection of his interesting "Populäre wissenschaftliche Vorträge," published last year.† He directed attention on that occasion to the facts that meteorites sometimes contain compounds of carbon and hydrogen, and that the light emitted by the head of a comet gives a

spectrum which bears the closest resemblance to that of the electric light when the arc is surrounded by a gaseous hydrocarbon. Carbon is the characteristic element of the organic compounds of which all things living are built up. "Who can say," he asks, "whether these bodies which wander about through space may not also strew germs of life where a new heavenly body has become fitted to offer a habitat to organized creatures?" The hypothesis, in the form set forth in 1871 by Professor Helmholtz and Sir William Thomson, was vigorously handled by Zöllner, of Leipzig, whose work, "Ueber die Natur der Cometen," appeared in the following year. In the *Vorrede* of his book he passes his countryman by unmentioned, but declares Sir William Thomson's proposition to be unscientific, and that in a twofold sense. In the first place, he maintains it is unscientific in a formal or logical sense, in that it changes the original simple question, Why has our earth become covered with organisms? into a second, Why had that heavenly body the fragment of which fell upon our planet become covered with vegetation, and not our earth itself? "If, however," he adds, "bearing in mind an earlier dictum,* we regard inorganic and organic matter as two substances from all eternity diverse, just as in accordance with our present views we consider two chemical elements to be diverse, such an hypothesis as that now advanced must be at variance with the destructibility of organisms by heat which experience has taught us."

"Again," contends Zöllner, "the hypothesis in its material bearing is unscientific. When a meteorite plunges with planetary velocity into our atmosphere, the loss of *vis viva* arising from friction is converted into heat, which raises the temperature of the stone to a point where incandescence and combustion take place. This, at all events, is the theory at present generally held to explain the phenomena of star-showers and fire-balls. A meteorite, then, laden with organisms, even if it could withstand the sundering of the parent mass unscathed, and should take no part in the general

* He alludes here in a note to the theory held by Laplace and others.

† "Populäre wissenschaftliche Vorträge. Von H. Helmholtz." Braunschweig: Vieweg und Sohn. 1876. Drittes Heft. p. 135.

* "Dead matter cannot become living matter unless it be subject to the influence of matter already living."

rise of temperature resulting from this disruption, must of necessity traverse the earth's atmosphere before it could deliver at the earth's surface organisms to stock our planet with living forms."

Helmholtz did not long delay in replying to Zöllner's criticism on this question. An opportunity occurred during the publication, in the following year, 1873, of the second part of the German translation of Thomson and Tait's "Handbook of Theoretical Physics." The preface contains Helmholtz's answer. He points to the fact, confirmed by numerous observers, that the larger meteoric stones, during their transit through our atmosphere, become heated only on the outer surface, the interior remaining cold—often very cold. Germs which may happen to lie in the crevices of such stones would be protected from scorching while travelling through the air. Those, moreover, which lie on or near the surface of the aerolite would, as soon as it entered the upper and most attenuated strata of our atmosphere, be blown off by the swift and violent current of air long ere the stone can rend those denser layers of our gaseous envelope where compression is sufficiently great to cause a perceptible rise of temperature. As regards that other point of debate, referred to by Thomson only, the collision of two cosmical masses, Helmholtz shows that the first result of contact would be violent mechanical movement, and that it is only when they begin to be worn down and destroyed by friction that heat would be developed. It is not known whether this may not continue for hours or days, or even weeks. Such portions as at the first moment of contact are hurled away with planetary velocity may consequently be driven from the scene of action before any rise of temperature may have taken place. "It is not impossible," he adds, "that a meteorite or a swarm of meteorites, in traversing the upper layers of the atmosphere of a heavenly body, may either scatter from them or carry with them a quantity of air containing unscorched germs. These are possibilities which are not yet to be taken as probabilities; they are questions which, from the fact of their existence and range, are to be kept in sight, so that, should a case arise, they may receive an answer either

by actual observations or by some conclusive deduction." It should be mentioned here that these views of Helmholtz's are also to be met with in a supplement to his lecture on the origin of the solar system.

In tracing the gradual development of this important controversy we now arrive at the present year, and proceed to discuss the allusion made to it by Professor Allen Thomson in his address at Plymouth. The difficulty regarding the origin of life is, he considers, not abolished, but only removed to a more remote period, by the supposition of the transport of germs from another planet, or their introduction by means of meteorites or meteoric dust; for, besides the objection arising from the circumstance that these bodies must have been subjected to a very high temperature, we should still have everything to learn as to the way in which the germs arose in the far distant regions of space from which they have been conveyed. At one of the Sectional meetings, a few days later, Sir William Thomson made these observations the text of a further communication on the now well-worn subject. He desired to limit the discussion to the bare dry question, Was life possible on a meteorite? The hypothesis which was to explain the bringing of life to our earth did not pretend to explain the origin of life, and he would not attempt to offer an explanation of the origin of life. The three questions which presented themselves were these: Was life possible on a meteorite moving in space? Was life possible on a meteorite while falling to the earth's surface? and, Could any germs live after the meteorite had become imbedded in the earth? A meteorite may be exposed to great heat before it reaches the earth; whether or not life on that meteorite would be destroyed by that heat was dependent on the duration of exposure. If a meteorite traversed space with the same side always exposed to the sun that side would be strongly heated, the other would be cold; if it spun round at a uniform rate all its surface would be of one uniform temperature; and if it rotated once per hour it would have a high temperature on one side and be as cold as ice on the other. The whole or part of the surface of a meteorite might afford a climate

suitable to some living forms, destructive to others. When the moss-covered stone enters the atmosphere the germs upon its surface would be [torn off long before the stone became heated, and in a few years they may settle down on the earth, take root, and grow. But were the germs of the exterior destroyed by heat, there might still be vegetable life in the interior. The time occupied by a stone in its passage through the air would not be more than twenty or thirty seconds at the outside, so that the crust might be fused, while the interior might have a moderate temperature, and anything alive in it would fall to the earth alive. Sir William Thomson concluded by remarking that after the collision of cosmical masses fragments must be shot off, some of which must certainly carry away living things not destroyed by the shock of the collision, and he did not hesitate to maintain, as a not improbable supposition, that at some time or other we should have growing on this earth a plant of meteoric origin.

Nothing bearing the semblance of a plant or even of its seed has as yet been met with in a meteorite; nor have any of the masses which have fallen on our planet shown anything approaching the structure which distinguishes sedimentary rocks from those of a purely plutonic character. The occurrence, however, in them, or with them, of organic compounds, of compounds of carbon and hydrogen, which it is hard to suppose could owe their existence to any other agency than that of life itself, and which represent the final stage previous to their final destruction, has now been so frequently noticed that I have put together in chronological order what information in this direction from a "world ayont" the meteorites have brought to us.

1806. *March 15th*, 5 P.M.—Two stones, weighing together six kilogr., fell at Alais, Dép. du Gard, France. They have the appearance of an earthy variety of coal; the color of the crust is a dull brownish-black, so is that of the interior. The structure is very soft and friable. When heated it emits a faint bituminous odor. It was examined at the time of its fall by Thénard and a Commission appointed by the Institute of France. The French observers found it to contain 2.5 per cent. of carbon; while Berzelius, in 1834

estimated the amount of carbon present to be 3.05 per cent. In 1862 Roscoe submitted this meteorite to a very thorough investigation. He found the carbon present to amount to 3.36 per cent. Ether dissolved 1.94 per cent. of the stone; the solution on evaporation left crystals which have an aromatic odor, and a fusing-point of 114° C., and which sublime on the application of heat, leaving a slight carbonaceous residue. The crystals really appear to be of two kinds: *acicular* crystals, which are sparingly soluble in absolute alcohol, but are readily taken up by ether, carbon disulphide, turpentine, and cold nitric acid, and dissolve in cold sulphuric acid, striking a brown color; and *rhombic* crystals, which dissolve in ether and carbon disulphide, but are unaffected by cold nitric acid, sulphuric acid, or turpentine. An analysis of 0.0078 gramme of the crystals soluble in alcohol gave the following numbers:—

Sulphurous acid.....	0.010
Carbonic acid.....	0.008
Water.....	0.003
Sulphur.....	0.005
Carbon.....	0.0022
Hydrogen.....	0.0003

The atomic ratio of carbon to hydrogen, then, is nearly 1 : 1, or that of the reddish-brown and colorless mineral resin *könleinite*, which occurs in crystalline plates and grains in the lignite of Uznach, in Switzerland. Kraus makes the fusing-point of *könleinite* 114° C.; it is slightly soluble in alcohol, but much more soluble in ether. Dr. Lawrence Smith, who has recently examined the Alais meteorite, arrives at the same results as Roscoe; and also that the carbonaceous ingredient of this meteorite resembles in all its physical characters those of a substance which he obtained from the graphite of the Sevier-County meteoric iron, to which I shall presently refer.

1838. *October 13th*, 9 A.M.—At the hour mentioned a great number of large stones fell over a considerable area at Kold-Bokkeveld, seventy miles from Cape Town. Those which fell near Tulbagh are estimated to have weighed many hundredweights. It is said that they were soft when they fell, but became hard after a time. This material has a dull black color, and is very porous and friable. Harris, who analysed it in

1859, determined the presence of 1.67 per cent of carbon, and somewhat more than 0.25 per cent. of an organic substance soluble in alcohol. This compound is described as possessing a yellow color, and a soft resinous, or waxy, aspect. It readily fused with a slight rise of temperature, and when heated in a tube it was decomposed, emitting a strong bituminous odor, and leaving a carbonaceous residue. Some four years ago I was considering what should be done with a trace of this substance, so small in amount that it could not be removed from the vessel containing it. I was unwilling to throw away even so small a quantity of so precious a substance, so I drew off the neck of the flask and placed it in a dark cupboard of a room, the temperature of which, during the greater part of the year, is unusually high. In the interval this organic compound has sublimed, and is deposited on the higher parts of the vessel in colorless and well-defined crystalline plates.

1840.—During this year a large mass of meteoric iron was discovered in Sevier County, Tennessee, enclosing a large nodule of graphite. "It is," writes Dr. Lawrence Smith, "the largest mass of graphite which has come under my observation, and is perhaps the largest known." Its dimensions are 60^{mm} by 20^{mm} and 35^{mm}, and it weighs 92 grammes. Two grammes of this nodule were reduced to powder and treated with ether, and the liquid on evaporation left a residue weighing 15 milligrammes, and possessing an aromatic, somewhat alliaceous, odor. It consisted of long colorless acicular crystals, others which were shorter, as well as some rhomboidal crystals and rounded particles. This extracted substance melted at about 120° C. When heated in a tube closed at one end it melts and then volatilizes, condensing in yellow drops, and leaving a carbonaceous residue. Dr. Lawrence Smith believes that the three elements, carbon, hydrogen, and sulphur, which they contain, may be in combination, and he has named the meteoric sulphohydrocarbon "celestialite."

1857. *April 15th, 10.11 P.M.*—A brilliant detonating meteor was observed at this hour over Kaba, S.W. of Debreczin, Hungary, and a meteorite weighing 4 kilogr. was found on the following morn-

ing imbedded in the hard surface of a road close by. The crust is black, and the mass of the stone dark grey; throughout the structure black portions of the size of peas lie scattered, giving the stone a porphyritic character. Wöhler treated the stone with alcohol, which removed a white, apparently crystalline, substance possessing a peculiar aromatic odor. With ether it broke up into oily drops, and appeared to be decomposed into an insoluble fluid body and a soluble solid portion. The solid substance was obtained in a distinctly crystalline condition on driving off the ether. It volatilizes in air, fuses in a closed tube, and is decomposed when greater heat is applied, a fatty odor being observed, and a black residue left. The hydrocarbon is believed by Wöhler to be allied to ozocerite or scheererite. When the powdered stone is heated in oxygen it turns of a cinnamon-brown color. This meteorite contains 0.58 per cent. of carbon.

1861.—The huge mass of meteoric iron discovered at Cranbourne, near Melbourne, Australia, in 1861, encloses more or less rounded masses of carbon. They are pronounced by Berthelot, who has submitted some of the material to the most powerful oxidizing reagents, to resemble the form of carbon which separates from cast-iron on cooling rather than native graphite.

1864. *May 14th, 8 P.M.*—On this occasion more than twenty stones fell at Montauban, Tarn et Garonne, France, some of them being as large as a human head, and most of them smaller than a fist. The appearance which this meteorite exhibits closely resembles that of a dull-colored earthy lignite. The masses are black and very friable, and fall to powder when placed in water; this is due to the removal of the soluble salts which cement the ingredients together. A shower of rain would have destroyed them. One hundred parts of this stone contain 5.92 parts of carbon itself, partly as a constituent of one organic compound, which Cloëz found to possess the following composition:—

Carbon.....	63.45
Hydrogen.....	5.98
Oxygen.....	30.57
	<hr/>
	100.00

Berthelot endeavored to reconstruct

the body of which this is a decomposed product by means of hydriodic acid, and obtained a considerable quantity of the hydrocarbon $C_{25}H_{52}$ analogous to rock-oil. The reduction takes place less readily in this case than in that of coal. Dr. Lawrence Smith finds the combustible portion of the material to amount to about 4.5 per cent.

1867.—This Indian meteorite, which fell at Goalpara about the year 1867 (the exact date is not known), was examined by Tschermak, who found it to contain 0.85 per cent. of a hydrocarbon. The quantity, though small, materially affects the general appearance of the stone; it can be recognized under the microscope as a smoky-brown, lustreless ingredient accompanying the fragments of nickel-iron. Of the 0.85 per cent. 0.72 is carbon and 0.13 hydrogen. Tschermak suggests that the luminous phenomena so often attending the fall of an aerolite and the "tail" left by many meteors and shooting stars may be due to the combustion of compounds of which carbon forms an important constituent.

1868. *July 11th.*—The curious meteorite of dull grey hue and loose structure which fell on this day at Ornans, Doubs, France, partly owes its dark color to the presence of a hydrocarbon.

1869. *January 1st, 12.20 P.M.*—A most remarkable fall of stones took place on New Year's Day, 1869, at Hessle, near Upsala; it is the first aerolitic shower recorded to have taken place in Sweden. The meteorites have so loose a structure that they break in pieces when thrown with the hand against the floor or frozen ground. The most interesting feature of the Hessle fall is the association with the stones referred to of matter mainly composed of carbon. The peasants of Hessle noticed that some of the meteorites which fell on the snow near Arnö soon crumbled to a blackish-brown powder resembling coffee-grounds. Similar powder was found on the ice at Hafslaviken in masses as large as the hand, which floated on water like foam, and could not be held between the fingers. A small amount secured for examination was found under the microscope to be composed of small spherules; it contained particles extractible by the magnet, and when ignited left a reddish-brown ash. Heated in a closed tube it

gave a small brown distillate. A quantity dried at 110° C. possessed the following composition:—

Carbon.....	51.6
Hydrogen.....	3.8
Oxygen (calculated).....	15.7
Silicic acid.....	16.7
Iron protoxide.....	8.4
Magnesia.....	1.5
Lime.....	0.8
Soda and Lithia.....	1.5
	<hr/> 100.0

The combustible ingredient appears to have the composition $n C_8H_8O_3$. It was noticed on this occasion that the stones found in the same district with the carbonaceous substance, were, as a rule, quite round and covered on all sides with a black, dull, and often almost sponge-like, crust. The iron particles on the surface of the smaller stones were usually quite bright and unoxidized, as though the stone had been heated in a reducing atmosphere. Nordenskjöld, who examined them, expresses the belief that this carbon compound frequently, perhaps invariably, occurs in association with the meteorites, and he attributes its preservation in this case to the fall of the stones on snow-covered ground.

1870.—During this year the Swedish Arctic Expedition discovered in the basalt of Ovifak, near Godhavn, Island of Disko, Greenland, some enormous metallic masses which are generally regarded as blocks of meteoric iron. Like meteoric iron, they contain nickel and cobalt, but, unlike that iron, they are but slightly attacked by hydrochloric acid. The metal, moreover, when heated evolves more than 100 times its volume of a gas which burns with a pale blue flame, and is carbonic oxide mixed with a little carbonic acid; after this treatment the substance dissolves in acid, leaving a carbonaceous residue. The composition of this remarkable "iron," if we may call it by that name, has been found by Wöhler to be as follows:—

Iron.....	80.64
Nickel.....	1.19
Cobalt.....	0.49
Phosphorus.....	0.15
Sulphur.....	2.82
Carbon.....	3.67
Oxygen.....	11.09
	<hr/> 100.05

It appears to be a mixture of about 40 per cent. of magnetite with metallic iron, its carbide, sulphide, and phosphide, and its alloys of nickel and cobalt, as well as some pure carbon in isolated particles.

From all this we see though there is not a particle of evidence to prove the persistence of living germs on meteorites during their passage through our atmosphere, it is quite clear that the cosmical bodies, whatever they may have been, from which our meteorites were derived, may very probably have borne on their surface some forms of organized beings.

One objection which appears to have been raised to Sir William Thomson's theory was to the effect that germs could not exist without air; another that the low temperature to which they would be exposed before entering our atmosphere would suffice to destroy life. Micheli, in his valuable *Coup d'œil sur les principales publications de Physiologie végétale*, refers to the researches of Uloth,* who found that twenty-four species of plants

which had been placed in a cave in the centre of a glacier germinated after the lapse of six weeks. *Lepidium rudemale* and *sativum*, *Sinapis alba*, and *Brassica Napus*, had germinated; and at the close of four months other crucifers and some grasses and leguminous plants had germinated also. Haberlandt found that of a number of seeds which had been exposed for four months to a temperature of 0° to 10° the following species flourished: rye, hemp, vetch, pea, mustard, camelina, two species of clover, and lucerne. The influence of the withdrawal of air from seeds on their power of germination has also been studied by Haberlandt. He found that seeds after they had been placed *in vacuo* germinated as usual. A slight retardation was noticed in the case of the seeds of the oat, the beetroot, and a bean, which appear to require the air contained in their tissues. In three experiments 58, 32, and 40 per cent. of the seeds germinated.—*Popular Science Review*.

ON THE COMPARATIVE STUPIDITY OF POLITICIANS.

WE owe an apology to a very respectable class of persons for the apparent, but we trust only apparent, and certainly involuntary, discourtesy of the thesis to which we invite attention. The late Mr. Mill, in a well-known passage, called the Conservatives the stupid party. We do not call them so, nor their opponents. All we venture to assert of both is, that in a universe of graduated intelligence they are not highest in the scale. The great majority of even prominent politicians have just the gifts which make a man conspicuous in a town council or a board of guardians; physical energy, moral persistency, and ideas on a level with those of their fellows. Miss Martineau in her very candid Autobiography has recorded her sense of the mental and moral inferiority of the political men with whom, during her period of lionising in London, she was brought into contact, as compared with the men of letters, and still more, with the men of science, whose acquaintance she made. She observed in the politicians a much lower type of mind and character, ex-

pressing itself even in a certain vulgarity of manners, the lowest point being reached in all these particulars by the Whig aristocracy of the day.

The Whig aristocracy, in virtue, perhaps, of the phenomena which Miss Martineau noted, has almost ceased to play any active part in public affairs. In the struggle for political existence it has been pretty nearly crushed out. Such titular chieftainship as used, let us say, up to the time of Lord Althorp to be accorded to its members is Macmahonian. Not ability and eloquence, but the conspicuous lack of them, dictated a choice rather of a figure-head than of a leader. But no doubt there is such a thing as a force of stupidity which is often more powerful in human affairs for the moment than any other. When intellectual dulness is united with moral rectitude, as it frequently is, the combination is pretty nearly irresistible. Either without the other is a power of the first magnitude. Both together are fate.

We do not suppose that there has been any great change for the worse in the talent of the great families, from the

* "Flora," 1875, No. 17.

time when the English government first became their special business and almost their property. It would be ungenerous and even unjust to think so. Their imaginary superiority in earlier generations was probably due to the fact that they themselves supplied their own standard of comparison. They were measured against each other. In a company of dwarfs a diminutive man seems a giant. If from the political history of the last century and a half we withdraw the names of Walpole, of the Pitts, of Fox, Burke, Canning, Brougham, Peel, Cobden, Bright, Gladstone, and Disraeli, and two or three more, we take away almost all that gives it distinction. In spite of the Earldoms of Orford and Chatham, and the Barony of Holland, the Walpoles, the Pitts, and the Foxes no more belonged to the aristocracy than Lord Beaconsfield does, or than Richard Burke would have done if the fates adverse to Marcellus had permitted him to be Lord Beaconsfield. The Marquis of Rockingham and the Duke of Portland are fair specimens of the aristocratic statesmanship of England. Lord Shelburne, Lord Grey, Lord Russell, Lord Palmerston, and the late Lord Derby rose as much above that level as the old Duke of Newcastle fell below it. The abilities of Addington, which were ludicrously below par in a middle-class politician, would have given him a very decent place among the old families if he had belonged to them.

We refer to these things now, because the rule of the great families has done something to lower the standard of political eminence and ability in England. They flourished under a system of very restricted competition, a competition so restricted as to amount to little more than an arranged participation in the great affairs of state. Of course, they themselves were prevented from developing such capacities as they had by the absence of the proper stimulus to exertion. It would be as reasonable to expect commercial enterprise and skill under trade monopolies as the highest political capacity under a system of political privilege. When the buyer is obliged to take such articles as the seller chooses to give him, they are not likely to be of the first quality, or the most reasonable price. If the rulers of a people nominate

themselves, they are just as little likely to be very exacting in the articles of virtue and capacity. When these qualities were wanted, some plebeian person, some Burke or Barré, was looked for to supply such of them as he possessed; and, unfortunately for human nature, the self-respect which declined to wait upon my Lord Rockingham or my Lord Shelburne was seldom found. If oratory was wanted, the plebeians had it in readiness; but oratory as a rule was seldom wanted. A nominated House of Commons, whose opinions were dictated by their patrons, did not need to be persuaded. Hence probably, to some extent, the low standard of speaking which prevails in the House of Commons, and in which (whatever the exceptional divergencies) it falls below every other great Parliamentary assembly. It is a bequest from the time when good speaking was a superfluity for the purposes of government, and when it was regarded mainly as the accomplishment of political adventurers — needful in a Burke, unnecessary in a Rockingham. Hence there is a tradition of bad speaking in the House of Commons. The defects of elocution and delivery, and the absence of taste and style, which are noticeable in the speeches delivered from the benches of Ministers and ex-Ministers in the two Houses of Parliament, amaze foreigners acquainted with the legislative assemblies of other countries. They are a tradition of the age when a great lord did not need to acquire either grace of speech or force of thought. It was sufficient for him to indicate the line which he took, and his party trouble themselves as little as he did about the reasons; or if from any cause they wanted them, some dependant was at hand to supply the arguments which his patron, from indolence or incapacity, was unable to afford. A cynical politician, more remarkable himself for the keenness of his thought than the graces of his oratory, is said to have declared that a certain speech listened to with attention from the son of a duke would not have been tolerated from the son of a marquis. The distinction, perhaps, is too finely cut, but this rule of judgment comes down from our political history, and unfortunately is not yet obsolete. What has been said of oratory

applies to administration. In the absence of anything like competition among the ablest men, and of a career open to talent, the proper stimulus to skill and industry was wanting. Great peers and wealthy country gentlemen, untrained to business, aided by adventurers bent upon serving themselves rather than the country, and using the ill-rewarded drudgery of hopeless clerks, were poor instruments for the conduct of affairs. As their tenure of office was to a great extent independent of capacity, it developed capacity to a correspondingly slight extent. A lofty ambition, an ardent nature, a consciousness of powers seeking and delighting in their full discharge, have no doubt at all times furnished orators and statesmen of the highest rank to England. But the great names and stirring conflicts of Walpole and Pulteney, of Chatham, of Wyndham, of Burke, of Fox and Pitt, disguise from us the gulf of intellectual poverty beneath this glittering and splendid surface.

In the long prevalence of an aristocratic monopoly, diminished now, but not altogether done away with, and subsisting still in its effects even more powerfully than in itself, one of the special causes, as we have said, of the comparative stupidity of politicians in England may be discerned. But the evil is inherent in the very conditions of what are called practical politics. The real development of mind is to be sought in what Mr. Arnold calls its disinterested play in science and art. Discipline in the methods of research after truth, familiarity with the highest conceptions of the universe, delight in the most perfect forms of expression, whether they take the shape of literature or of the plastic and imitative arts, these are the feeders and purifiers of the mind. The artist, including the author as well as the sculptor, the painter, and the actor, and the man of science, live, so far as they are true to their work, in the society of nature and of its great interpreters. They are constantly in the presence of their betters. The statesman lives habitually in the society of county and borough members; or, if we restrict our view to the intimate associations of the Cabinet, of men little if at all above these intellectually. In other words, the finest mind is habitually in the presence of its

inferiors, whose ideas and impulses are to it what his daily beer was to Mr. Justice Maule, the instrumentality with which he brought himself down to the level of his work. He must think their thoughts and speak their language. To be over their heads, is to be, as a dexterous politician said of a great philosopher, too clever for the House of Commons, to have nobler and farther-reaching conceptions than they, is to commit the sin for which there is no Parliamentary forgiveness. It is sometimes said that the House of Commons is wiser than any single member; a saying which, according as it is interpreted, is either an absurdity or a truism. It may mean, what is indisputable, that the whole is greater than the part, or, what is impossible, that the average is higher than the elements which raise it. The House of Commons can only be wiser than some particular member by following the guidance of some other member who on that particular occasion is wiser than he; that is to say, it is wiser than one of its less wise members. The saying, however, is intended to affirm the position that intellectual superiority is not the truest guide in politics, or in other words that politicians, in so far as they are successful, are comparatively stupid, a position which we are far from disputing. On the contrary, we affirm it as a truth of observation and experience, and are at the present moment doing our best to account for it. As regards the proposition itself, it means simply that the House of Commons knows its own mind, such as it is, and, whatever the worth of that knowledge, better than any single member of it; and as a rule the average member who is in sympathy with it will interpret it better than the member of much higher powers who is above its level. But it is only wiser than its wisest members in the sense in which the field may be said to be wiser than the farmer, or the ocean than the navigator; that is to say, in no intelligible sense at all. Like nature, if it is to be commanded it must be obeyed; and the necessity of understanding it is by confusion of thought taken for its understanding of itself.

The inferior society in which politicians live, inferior in intelligence and cultivation, and the necessity of adapting

their own thoughts and aims to those of the ordinary minds and characters they have to influence, brings about the decline and deterioration of men of originally fine endowments. It either prevents these qualities from developing, or stunts them where they have a certain degree of growth. Their 'nature is subdued to what it works in, like the dyer's hand.' This evil is in part qualified by another. It is chiefly the second-rate order of minds and characters that betake themselves now to politics in England—minds already on the level to which superiority needs to be reduced before it can be effective. For this reason, probably, whenever an occasion demands a hero in politics, he has been seldom found in the walks of professional statesmanship. The national crisis which asks for a deliverer, finds him not among those who have been deteriorated and dwarfed by the ordinary work and associations of politics, but in a man who has lived among nobler ideas and associations, and cultivated a larger and more liberal nature. The practice of affairs is, no doubt, a discipline of some value; but nearly everything depends on what the affairs are. To manage the House of Commons, to get bills through committee, to administer a public office, does not seem usually to be good training for very difficult business. When a considerable emergency occurs there is almost invariably a breakdown of the departments. The true discipline of public business is to teach men readiness in action and fertility in resources. Its ordinary effect is to harden them in routine, which suits poorly enough even the common round and the daily task of business, and which is a hindrance and which may be ruin when necessities, transcending precedents and rules of office, have to be encountered. The fact is that the training of affairs, invaluable as it is, seldom bears its proper fruit, unless the affairs are a man's own, or when the consequences of failure are sure to come upon him in a rapid and crushing manner. The merchant or capitalist whose ventures depend upon his personal vigilance; the engineer who has to deal with overwhelming physical forces, the military commander who has to contend at once with the not always benevolent neutrality of nature and the watchfulness

of human enemies, cannot afford to take things easily. Action is forced upon them; they must either succeed or conspicuously fail. In politics, usually, the state of things is entirely different. The demand is rarely made for heroic measures; the prudence which is taught is that rather which shuns difficulty and dreads failure, than that blending of caution and audacity which finds in the way of seeming danger the true path of safety. The education of practice in Parliamentary politics is therefore for the most part an education in the arts of inaction, evasion, and delay. The blame of doing nothing is usually less than the blame of doing amiss. A great writer, whose instinctive sagacity was often wiser than the elaborated reflections of more painful thinkers, embodied the characteristic weakness of political training in England, when he made 'How not to do it' the aim of our statesmen. Lord Melbourne's 'Can't you leave it alone?' gave expression to the same paralysis of action in excessive caution and prudence. Politics of this sort will attract feeble minds and characters, or will enfeeble those naturally stronger. The oratory which they foster will be that of mystification, amusement, and excitement. Acquaintance with political philosophy or economic science will be felt to be wholly superfluous. Even that empirical knowledge of his age and country, and of the assembly in and through which he rules, which are essential to every practical statesman, will be little more than the charlatan's or demagogue's acquaintance with the foibles and passions of popular sentiment and opinion. The admiral who boasted that he brought his ships home uninjured from seas in which he had not encountered the enemy, and the Frenchman whose achievement it was to have kept himself alive during the French revolution, represent the prevalent aims of modern statesmanship. A ministry exists to keep itself in existence; if the ship, without going anywhere or doing anything, can be kept afloat, that is held to be all that can be required. This *fainéant* policy does not require any high range of intellect. Men of the first order will seek careers which afford ampler scope to capacity. If they betake themselves to public life, which af-

fords them no opportunity of great public work, there is danger of their devoting their energies to their own private and personal ends. Or merely to establish a character for 'honesty' will often prove enough to repose on. A picture, a statue, or a poem, does not receive additional value from the fact that its author is a very pleasant and straightforward sort of fellow; but 'honest Jack Althorp's' statesmanship rested entirely on this basis of character; and a late Parliamentary leader has been commended on the ground that 'there is not the making of a lie in him.' A career in which character may be a substitute for capacity must, from the nature of the case, be pursued on a lower intellectual level than those in which intelligence and cultivation and general or special knowledge are absolutely essential.

The natural and almost necessary inferiority of politicians as a class, is compatible with the unsurpassed intellectual and moral greatness of statesmanship of the highest class. Men are not wanting in the history of any country, least of all in that of ours, and they have representatives among us now, who have found or made work for themselves to do

which taxes the very highest gifts, and in the doing of which the very humblest and most commonplace allies and instruments acquire a sort of transfiguration. Their appearance and exertions mark the high-water point in the national life, an epoch of brief but fruitful work, an epoch of civil heroism. But the languor comes after the exertion; and in such a period of languor we seem now to be plunged. Even the men who counted for much when they followed a great leader, become mere cyphers when the figure which stood at their head is removed.

Apart from these singular cases of moral and intellectual ascendancy, the gifts which make a Parliamentary leader are just those which make a man popular in society. The cheerful animal spirits and vigorous gaiety of temperament which characterised Lord Palmerston, or the amusing qualities of a public entertainer which marked Charles Townshend (not to seek for living illustrations), are what it most relishes—the qualities which make a first-rate host in a country house, or an amusing diner-out in town.—*Fraser's Magazine*.

LA BELLA MORTE.

BY CHARLES MACKAY.

I.

I DREAMED a pleasant dream of Death,
As a lady fair and bright,
Who came to my bedside suddenly
In the stillness of the night.
'Art thou afraid of me?' she said,
In tones so sweet and low
That I knew she spoke as a kindly friend,
And not as a vengeful foe;
And I answered cheerily, and smiled,
'No, my beloved! no!

II.

'Why should I fear? Thou canst not come
An hour before thy time.
If 'tis thine hour, 'twill be thine hour,
Appointed and sublime.
I should have lived my life in vain,

Nor seen where all things tend,
If I'd not surely known and felt
That thou wouldst be my friend,
And that beginning were but loss
Unless for the blessed end.

III.

'Come to me, then, O kindly Death!
I fear thee not at all!
The immortal mind can never be
The mortal body's thrall.
I see thee stretch thy radiant hand
To open wide the door
Through which my spirit, glad to pass,
Shall surge, and spring, and soar,
And learn to learn, and know to know,
Ever and evermore!

IV.

'Dear mother! on thy face I look,
And feel myself a child,
And know thou'lt purify my soul
From all that hath defiled.
I've no regrets to leave a world
Whose doleful paths I've trod:
Come when thou wilt; I'm well content
To rest in the quiet sod,
And go with thee to the Spirit-land,
To my Father and my God!'

Belgravia Magazine.

YOUNG MUSGRAVE.

BY MRS. OLIPHANT.

CHAPTER XXVIII.

THE LOVES OF THE ANGELS.

WHILE these events were going on at the Castle Lord Stanton, for his part, had come to a standstill in the matter which he had been drawn into so inadvertently, and which had become so very serious an occupation in his life. He was young and unacquainted with the ways of the world, and he did not know what step to take next. And he too was paralysed by the sudden catastrophe which had happened to the Squire. Was it his fault? He could scarcely help an uneasy sense that by agitating him unduly he had helped to bring on the sudden attack, and thus he had left the Castle that evening with a heavy burden on his mind. And Geoff,

with entire unconsciousness of the lingering pangs of life and the tenacity of the human frame, believed, without any doubt, that Mr. Musgrave would die, and did not know what was to be done about the exile, whose position would thus be completely changed. In the meantime it seemed to him necessary to wait until the issue of this illness should be known. Thus his doubtfulness was supplanted by an apparent necessity, and the time went on with nothing done.

He went at first daily to inquire for the old man, and never failed to see Lillas somewhere waiting for him with serious intent face, and eyes which questioned even when the lips did not speak. Lillas did not say much at any time. She examined his face with her eyes and said "Papa?" with a voice

which trembled; but it became by degrees less easy to satisfy Liliás by telling her, as he did so often, that he had not forgotten, that he was doing everything that could be done, smoothing the way for her father's return, or waiting till he could more successfully smooth the way. "You do not believe me, Lily," Geoff said, with a sense of being doubted, which hurt him sadly. "Yes; but he is not your papa, Mr. Geoff, and you are grown up and don't want any one," Liliás said, with her lip quivering. The visionary child was deeply cast down by the condition of the house and the recollection of the melancholy rigid figure which she had seen carried past, with a pang of indescribable pain and terror. Liliás seemed to see him lying in his room, where Mary now spent almost all her time, pale with that deadly ashen paleness, his faded eyes half open, his helpless hands lying like bits of rag, all the grey fingers huddled together. Fright and sorrow together brought a sob out of her heart whenever she thought of this; not moving, not able to speak, or turn round, or look up at those who watched him; and still not dead! Liliás felt her heart stand still as she thought of her grandfather. And she had no one to take refuge with. Martuccia was frightened too, and would not go up or down stairs alone. Liliás, for her part, did all she could, out of pride, and shame of her own weakness, to conceal her terror; but oh, to have papa nigh to creep close to, to feel safe because he was there! A few tears dropped from her eyes. "You are grown up and you don't want any one." This went to Geoff's heart.

"Oh Lily, don't you think they would let you come to my mother?" he cried; "this is too sad for you, this dismal house; and if Nello goes away as you said——"

"Do you think I would go and leave Mary all alone? Nobody is sorry for Mary except me—and Mr. Pen. When she comes out of her room I go and I kiss her hand, and she cries. She would be more ill and more weary," said Liliás, with a precocious understanding, "if there was not some little thing to give her an excuse and make her cry."

"My little Lily! who taught you all that? it must have been the angels,"

cried Geoff, kissing in his turn the little hand.

But this touch had the same effect upon Liliás that her own kiss had on Mary. She cried and sobbed and did her best to swallow it down. "Oh, Mr. Geoff! I want papa!" she cried, with that little convulsive break in her voice which is so pitiful in a child. She was seated on Mary's chair at the door of the hall, and he on the threshold at her feet. Geoff did not know what kind of half-admiring, half-pitying sentiment he had for this child. He could not admire her enough, or wonder at her. She was but a child, not equal to him in his young manhood; and yet that very childhood in its unconsciousness was worlds above him, he thought. He felt like the man in the story who loved the fairy maiden—the young Immortal; would she give up her visionary paradise for his sake and learn to look at him, not as an angel but as a woman? but for that she must be a woman first, and at present she was but a child. When he kissed her hand it cost Liliás no blush. She accepted it with childish, angelical dignity. "She took the kiss sedately—" and the dark fountains of her eyes filled full, and two great tears tumbled over, and a piteous quiver came to her lips, and she said, "Oh, Mr. Geoff, I want papa!"

This was when the Squire had been ill about a week, six or seven days before Randolph took Nello away. Geoff went home riding, very full of thought. What could he do to please his little Lily? He preferred that she should creep close to himself and tell him her troubles, but he could not resist that plaint, and even though it should be against himself he must try what he could do to bring her father to her. Geoff thought a great deal on this subject, but it was very fatiguing and unsatisfactory, for he did not know what to do, and after a while he relapsed into the pleasanter path, and began to think of Lily. "Because of the angels," he said to himself as he jogged softly along, much more slowly and reflectively than his horse liked to go. He forgot where he was going and the engagements he had, and everything that was practical and important as he rambled on. The day was sweet in early autumn, the lake rippling musically upon

the beach, the sky blue and crossed by floating atoms of snowy cloud. Everything in the world was sweet and pleasant to the young man. "Because of the angels;" he had never been quite clear what these words meant, but he seemed to see quite plainly now, though he could no more have explained than he could have written *Hamlet*. "Because of the angels!" he seemed to make a little song of it as he went on, a drowsy, delicious burden like the humming of the bee. It was not he that said it, he thought, but it murmured all about him, wrapping him in a soft enchantment. Such a visionary love as his, perhaps has need of those intoxications of etherial fancy: for nothing can be so like the love of an angel as that of a young man possessed by a tender visionary passion for a child.

Geoff was so wrapt in his own thoughts that he did not see for some time the beckonings and signals that were coming to him from a carriage drawn up on the road to which the path descended, along which he was moving so gently. When his attention was at last caught, he saw it was his cousin Mary, leaning half out of the window in her eagerness.

"Give your horse to the footman and come in here—I have so much to say to you," she said.

But when he had done as she told him and taken his seat beside her, Lady Stanton kept looking at her young cousin.

"What is it?" she said; "you keep on smiling, and there is a little drowsy, dreamy, intoxicated air about you; what has happened, Geoff?"

"Nothing; and it is unkind to say I look intoxicated. Could you not find a prettier word?"

"I believe you are really, really!—Geoff, I think I know what it means, and I hope it is somebody very nice. Tell me, who is she?"

"This is strange," said Geoff; "indeed, it is true, I have been visiting a lady; but she is only twelve years old," he said, turning to her with a vivid blush.

"Oh, Geoff!" Mary's brow contracted, "you do not mean *that* little girl?"

"Why shouldn't I mean her? I will make you my confessor, Cousin Mary. I don't think I shall ever marry any one but little Lily. Of course she is very

little, and when she is grown up she will probably have nothing to say to me; but I shall never care for any one else. Why should you shake your head? I never saw any one like her," said Geoff, growing solemn, and shaking off his blush as he saw himself opposed.

"Oh, Geoff!" Mary shook her head, and contracted her beautiful brow, "I do not think anything good can come out of that family; but I must not speak. I am jealous, I suppose. How did you know I did not want you for Annie or Fanny?" she went on with a smile that was a little strained and fictitious; for Mary knew very well that she was jealous, but not for Annie, or Fanny, or of Geoff.

"Hush," he said, "I loved you before Lily, but you could not have me; it is Lily, failing you. If you could but have seen her just now. The squire is lying between life and death, and Miss Musgrave, who was so good to her, is with him night and day, and poor little Lily is so lonely and frightened. She looks at me with her little lip all quivering, and says, 'Papa! I want papa.'" Geoff almost cried himself to recollect her piteous tone, and the tears came to Mary's eyes.

"Ah! if she takes after him, Geoff! but that is just what I want to talk to you about. I have done something that you may think trash. I have spoken to Sir Henry. He is—well, he has his faults like the rest of us—but he is just; he would not do a wrong thing. I told him that you had found out something——"

"What did he say?" cried Geoff, breathless, for Lady Stanton made a sudden pause.

She was looking across him out at the window; her eyes had strayed past his face, looking away from him as people do with a natural artifice to allow the first signs of displeasure to blow over, before they look an offended person in the face. But as she looked, Lady Stanton's countenance changed, her lips fell apart, her eyes widened out, her face paled, as if a cloud had passed over it. She gave a great cry, "Oh John, John!" she said.

"What is it? who is it?" cried Geoff.

She made him signs to have the carriage stopped; she could not speak.

Geoff did what he could to make the coachman hear him; but it was by no means the affair of a moment to gain the attention of that functionary, and induce him to stop. When, however, this was accomplished, Geoff obeyed the passionate desire in Lady Stanton's face, who all the time had been straining to look out, and jumped to the ground. He looked round anxiously, while she, half out of the carriage, gazed back, fixing her eyes upon one of those recesses in the road, which are common in the north country. "I see no one," said Geoff. He came back to the place on which her gaze was fixed, and looked behind the wall that bounded it, and all about, but could see nothing. When he returned, he found that Mary had fallen back in her corner, and was weeping bitterly. "He looked at me with such reproachful eyes. Oh, he need not; there was no reason. I would have saved or served him with my life," she cried; "and he had never any claim on me, Geoff, never any claim on me! why should he come and look at me with such reproachful eyes? If he is dead, he ought to know better than that. Surely he ought to know—"

The carriage, standing in the middle of the road, the young man searching about, not knowing what he was looking for, the coachman superbly indifferent on the box, contemplating the agitation of his inferiors with god-like calm, the footman, on Geoff's horse, with his mouth open, staring, while the beautiful lady wept inside, made the strangest picture. As a matter of course, the footman, riding on in advance, had seen nothing and nobody. He avowed frankly that he was not taking any notice of the folks on the road. He might have seen a man seated on the stones, he could not be certain. Neither had the coachman taken any notice. Foot passengers did not interest either of these functionaries. And Lady Stanton did not seem able to give any further explanation. The only thing to be done was to go on. She had been on her way to Stanton to give Geoff the advantage of Sir Henry's advice and opinion, and thither, accordingly, they proceeded after this interruption. Geoff took his place again beside his cousin, perhaps a little impatient of the stoppage; but as

she lay back in the corner, covering her face with her hands, Geoff's heart was too soft not to forget every other sentiment. He thought only of consoling her.

"Tell me what it was," he said, soothingly. "You saw—some one? Do not cry so bitterly. You never harmed anybody in your life. Tell me—you thought you saw—?"

"I saw *him*, as plainly as I see you, Geoff; don't tell me it was a fancy. He was sitting, resting, like a man tired with walking, dusty and worn out. I noticed his weary look before I saw his face, and just as we passed he raised his head. Oh, why should he have looked at *me* like that, Geoff? No, I never did any one harm, much less him. I have always stood up for him, you know, since you first spoke to me. I have always said, always—even before this was found out: living people mistake each other continually; but the dead—the dead ought to know—"

"Who is dead?" said Geoff; "are you speaking of John Musgrave, who is as much alive as I am?"

"If he were a living man," said Mary, solemnly, "how could I have seen him? Geoff, it is no mistake. I saw him, as I see you."

"And is that why you think him dead?" said Geoff, with natural surprise.

Lady Stanton raised herself erect in her corner. "Geoff, oh can you not understand?" she cried. But she did not herself quite understand what she meant. She thought from the suddenness of it, from the shock it gave her, and from the disappearance of the wayfarer, which was so inexplicable, that it was an apparition she had seen. John Musgrave could not be there, in the flesh, seated by the roadside; it was not possible; but when Geoff asked whether having seen him was an argument for thinking him dead, she had nothing to say. She wrung her hands. "I have seen him whether he is living or dead," she repeated, "and he looked at me with such eyes. He was not young as he used to be, but worn, and a little grey. I came to tell you what Sir Henry said; but here is something far, far more important. Know him! could I mistake him, do you think; how could I mistake him? Geoff, how could it be *he*,

sitting there, without any warning, without a word; but if it was he, if that was possible, why are we going on like this? Are we to desert him? give him up? I am talking folly," she said, again clasping her hands. "Oh, Geoff, a living man would not have looked at me with such eyes."

"He has not very much right to happy eyes, has he?" said Geoff; "coming home an outlaw, not venturing to speak to any one. It would not be half so sad if he were a ghost. But to come back, and not to dare to trust even his friends, not to know if he has any friends, not to be able to go home and see his children like any other man, to rest on the stones at the roadside, he to whom all the land belongs. I don't wonder he looked sad," cried Geoff, half-sympathetic, half-indignant. "How was he to know even that he would find a friend in you?"

Mary was sobbing, scarcely able to speak. "Oh, tell them to go back again—tell them to go back," she cried. There was no way of satisfying her but this: the carriage turned slowly round, rolling like a ship at sea. The coachman was disgusted and unwilling. "What did she want now?" he said, telegraphing with uplifted hands and eyes to the surprised footman on Geoff's horse. Lady Stanton was not a hard mistress like her stepdaughters, nor fantastical and unreasonable as they were. She took the carriage humbly when she could get it, and would consult this very coachman's convenience before bringing him out, which no one else thought of doing. Nevertheless Lady Stanton had her character in the house, and human nature required that it should be kept up. She was the stepmother, the scapegoat. "What is she after now?" the coachman said.

She got out of the carriage herself, trembling, to aid in the search, and the footman getting down, looked everywhere, even under the stones, and in the roadside hedges, but no one was there. When they resumed their way again, Mary lay back in her corner too much worn out with excitement and emotion to be able even to speak. Geoff could not tell whether she was glad or sorry to be brought to acknowledge that it was more likely to be John Musgrave whom

she had seen than his ghost. She was convinced by his reasoning. Oh, yes; no doubt, she said, it must be so. Because you saw a man unexpectedly, that was no reason for supposing him to be dead. Oh, no—Geoff was quite right; she saw the reason of all he said. But Mary's head and her heart and all her being thrilled with the shock. There was a ringing in her ears, and pulses were beating all over, and her blood coursing through her veins. The very country, so familiar, seemed to change its aspect. No stronger commentary could have been on the passage of time than the sudden glimpse of the face which she had seen just now on the roadside. But Mary did not think of that. The lake and the rural road that ran by it, and the hills in the distance, seemed to take again the colors of her youth. He was nothing to her, and never had been. She had not loved him, only had "taken an interest." But all that was most poignant in her life came back to her, with the knowledge that he was here. Once more it seemed to be that time when all is vivid, when every day may be the turning-point of life—the time that was consciously but a drift and floating on of hour by hour when it existed, as is the present moment—but which, looking back upon it seemed the time of free action, of choice, of every possibility. Was it so? Might he be met with round any corner, this man who had been banished so long? In the face of death and danger had he come back, he whom nobody had expected ever to come back? A strange half-question whether everything else had come back with him, and half-certainty that nothing for her could change, was in Mary's mind as she lay back, quivering with emotion, hearing Geoff's voice in her ears, not knowing a word he said. What had Geoff to do with it—young Geoff, to whom nothing had ever happened? She smiled vaguely to herself to think that the boy could think he knew. How was he to know? he was not of that time. But all the people in the road, and the very water itself, and the villages and houses, seemed to ask her, was it true?

This was all the evidence on the subject from which a judgment could be formed. Randolph Musgrave (who told

no one) had seen in his own words a something, a some one, whose face he did not see, but who suggested John to him so strongly that his very heart seemed to stop beating — then disappeared. And Lady Stanton from the window of the carriage, driving past, saw a face, which was John Musgrave's face grown older and worn, with hair that was slightly grey, instead of the brown curls of former years, and which disappeared too in the twinkling of an eye, and being searched for, could be found no more. What was it? an apparition conjured up by their interest or their fears — or John Musgrave, in his own person, come home?

CHAPTER XXIX.

NELLO'S JOURNEY.

RANDOLPH MUSGRAVE drove from the door of his father's house with a sigh of relief, yet of anxiety. He had not done what he meant to do, and affairs were more critical than when he went to Penninghame a few weeks before; but it was something at least to be out of the troubled atmosphere, and he had arranged in his own mind what he should do, which was in its way a gain, as soon as the breath was out of the old man's body—but when would that be? It was not to be desired, Randolph said to himself piously, that his father should linger long; his life was neither of use nor comfort to any one, and no pleasure, no advantage to himself. To lie there speechless, motionless, as much shut out of all human intercourse as if he were already in his coffin—what could any one desire but that, as soon as might be, it should come to an end?

He did not pay very much attention to his small companion. For the moment, Nello, having been thus secured and brought within his power, had no further importance, and Randolph sat with knitted brows pondering all he was to do, without any particular reference to the child. Nello had left the Castle easily enough; he had parted from Mary and from Lilius without any lingering of emotion, getting over it as quickly as possible. When it came to that he was eager to be off, to set out into the world. The little fellow's veins were full of excitement; he expected to

see he did not know what wonderful things, what objects of entrancing interest, as soon as he got outside the little region where everything was known to him. "Good-bye, Mary — good-bye, Lily," he said, waving his hand. He had his own little portmanteau with his name on it, a new little silver watch in his pocket — what could child want more? Lily, though she was his sister, was not a sensation like that watch. He took it out, and turned it round and round, and opened the case, and wound it up (he had wound it up twice this morning already, so that one turn of the key was all that was practicable). Nothing at the Castle, nothing in the society of Lily, was equal to this. He compared his watch with the clock in the druggist's in the village and found it fast; he compared it with the clock at the station and found that slow. He did not take any notice of his uncle, nor his uncle of him; each of them was indifferent, though partly hostile, to the other. Randolph was at his ease because he had this child, this troublesome atom, who might do harm though he could do no good, in his power; but Nello was at his ease, through pure indifference. He was not at the moment frightened of his uncle, and no other sentiment in regard to him had been developed in his mind. As calm as if Randolph had been a cabbage, Nello sat by his side and looked at his watch. The watch excited him, but his uncle——. Thus they went on, an unsympathetic pair. Nello stood about on the platform and looked at everything, while Randolph took the tickets. He was slightly hurt to hear that a half-ticket was still enough for himself, and moved away at once to the other side of the station, where the locomotive enthralled him. He stood and gazed at it with transport. What he would have given to have travelled there with the man who drove it, and leave Uncle Randolph behind! But still Nello took his place in the train with much indifference to Uncle Randolph. He was wholly occupied with what was going on before and about him: the rush across country, trees and fields flying by, and the stations where there was always something new, the groups of people standing about, the rush of some for the train, the late

arrival just as the doors were shut 'of those who were too late. These last made Nello laugh, their blank looks were so funny—and yet he was sorry for them; for what a thing it must be, he thought, to see other people go rushing out over the world to see everything, while you yourself were left dull at home! He remembered once himself being left with Martuccia in the still, deserted house when all the others had gone to the *festa*; how he thought the day would never end—and Martuccia thought so too. This made him sorry, very sorry, for the people who had lost their train. It did not occur to Nello that it might be no *festa* he was going to, or they were going to. What could any one want more than the journey itself? If you wearied of seeing the trains rush past, and counting the houses now on one side, now on another, there was the endless pleasure of dashing up to one station after another, when Nello could look down with fine superiority on the people who were not going, on the children above all, who looked up envious, and envied him, he felt sure.

By and by, however, though he would not confess it to himself, the delights of the journey began to pall; his little eyes grew fatigued with looking, and his little mind with the continuous spectacle of those long, flying breadths of country; and even the stations lost their charm. He would have liked to have somebody to talk to, and cast one or two wistful glances to see whether Uncle Randolph was practicable, but found no encouragement in that countenance, preoccupied, and somewhat lowering by nature, which appeared now and then in the wavering of the train, over the newspaper his uncle was reading. What a long time it took to read that paper! How it crackled when it was opened out! How tired Nello grew of seeing it opposite to him! And he began to grow cramped with sitting; his limbs wanted stretching, his mind wanted change; and he began to be hungry. Randolph, who scorned the poor refreshments of the railway, and thought it better to wait for his meal till he reached home, did not think of the difference between himself and the child. They travelled on and on through the dulness of the afternoon. Nello, who

had been so cheerful, felt disposed to sleep, but was too proud to yield to it; and then he began to think of his sister and the home he had left. It is natural, it is selfish, to remember home when we miss its comforts; but if that is not of the higher nature of love, it is yet the religion of the weak, and not despised by the great Succourer who bids men call upon Him in time of trouble. Nello's heart, when he began to feel tired and famished, recurred with a pathetic trust in the tenderness and in the certainty of the well-being that abode there, to his home.

When they stopped at a lively, bustling junction to change their direction, things mended a little. Nello ventured to buy himself a cake, his uncle not interfering, as they waited. "You will spoil your stomach with that sweet stuff," Randolph said, but he allowed the child to munch. And they had half-an-hour to wait, which of itself was something. Nello walked about, imitating Randolph's longer stride, though he did not accompany his uncle; and though he felt forlorn and very small among the crowd, marched about and looked at everything as the gentlemen did, recovering his spirits a little. And suddenly, with a great glow of pleasure all over him, Nello spied among the strangers who were hurrying to and fro a face he had seen before; it is true it was only the face of the countryman who had accosted him in the chase, and with whom he had but a small acquaintance, but even this was something in the waste of the unknown that surrounded him. The boy rushed up to him with a gleam of joy upon his small countenance. "I say, have you come from—home?"

"Yes, my little gentleman," said Wild Bampfylde. "I'm taking a journey like you, but I like best to tramp on my two legs. I'm going no further in your carriages that give you the cramp. I reckon you're tired too."

"A little," said Nello; "but that's no matter. What have you in your basket? is it another rabbit? I gave mine to Lily. They would not let me bring it though I wanted to bring it. School you know," said the boy, seriously, "is not like home. You have to be just like as if you were grown up there. Little—

you cannot help being little; but you have to be like as if you were grown up there."

"Ay, ay, that's the way to take it," said the countryman, looking down with a twinkle in his eye, half smiling, half sad, at the small creature beside him. "The thing is to be a man, and to mind that you must stand up like a man, whatever happens. If one hits you, you must hit him again, and be sure not to cry."

"Hit me," said Nello—"cry? Ah, you do not know the kind of school I am going to—for you are not a gentleman," he added, looking with selfish condescension at his adviser. "I like you just the same," said Nello, "but you are not a gentleman, are you? and how can you know?"

"The Lord forbid!" said Bampfylde, "one's enough in a family. It would be ill for us, and maybe for you too, if I were a gentleman. Look you here, my little man. Look at the bonnie bird in this basket—it's better than your rabbit. A rabbit, though it's one o' God's harmless creatures, has little sense, and cannot learn; but this bonnie thing is of use to God and man, as well as being bonnie to look at. Look at him! what a bonnie head he has, and an eye as meaning as your own."

"A pigeon!" said Nello, with a cry of delight. "Oh, I wish I might have him! Do you think I might have him? I could put him under the seat, and nobody would see the basket; and then when we got there——"

"Ay, that's the question—when you got there."

"I would say—it was my—fishing basket," said Nello. "He said they went fishing; and nobody would know. I would say Mary had—put things in it: nobody would ever find out, and I would keep it in my room, and buy seed for it and give it water, and it would live quite comfortable. And it would soon come to know me, wouldn't it? and hop about and sit on my shoulder. Oh, let me have it; won't you let me have it? Look here, I have a great deal of money," cried Nello, turning out his pocket; "five shillings to spend, and a sovereign Mary gave me. I will give you money for it, as much money as ever you please——"

"Whisht, my little lad; put back your money and keep it safe, for you'll have need of it. I brought the bird to give you. If they're kind folks they'll let you keep him. You must keep him safe, and take care he has his meat every day; and if they're unkind to you or treat you bad, put you his basket in the window and open the lid, and puff! he'll flee away and let your friends know."

"But I should not like him to flee away. I would like him to stay with me always, and sit on my shoulder, and eat out of my hand."

"My little gentleman," said Bampfylde, "I'm afraid your uncle will hear us. Try to understand. If you're ill-used, if they're unkind, let the bird fly, and he'll come and tell us. Mind now, what I'm saying. He'll come and tell us. Did you never read in your story-books——"

"Then it is an enchanted bird," said Nello, looking down, very gravely, into the basket. Lily had read to him of such things. He was not very much surprised; but a bird that some day would turn into a young prince did not attract him so much as one that would hop on his shoulder without ulterior object. He looked down at it very seriously, with more respect perhaps, but not so warm an interest. His little face had lost its animation. How Lily would have glowed and brightened at the idea! But Nello was no idealist. He preferred a real pigeon to all the enchanted princes in the world.

"Nay," said Bampfylde, with a gleam of a smile across his dark face, "it's no fairy, but it's a carrier. Did you never hear of that? And when you let it fly it will fly to me, and let me know that you are wanting something—that they're not kind to you, or that you're wanting to be away."

"Oh, they'll be kind," said Nello, carelessly; "I would rather he would stay with me, and never never fly away."

"I'll put him in the carriage for you," said Bampfylde, hurriedly, "for here's somebody coming. And don't you let any one know that you were speaking to me, or ever saw me before. And God bless you, my little gentleman!" said the vagrant, suddenly disappearing among the crowd.

While Nello stood staring after him Randolph came up, and tapped him sharply on the shoulder.

"What are you staring at? Have you seen any one you know?"

It was Nello's first lesson in deceiving.

"I—I was looking at a man—with wild beasts," he said.

"With wild beasts—in the station—here?"

"Yes, white rabbits and pigeons—and things; at least," said Nello to himself, "he once had a white rabbit, if he hasn't got one now."

"Rabbits!" said Randolph. "Come along, here is our train. It is late; and before I have got you settled, and got back here again, and am able to think of myself, it will be midnight, I believe. You children don't know what a trouble you are. I shall have lost my day looking after you. I should have been at home now but for you; and little gratitude I am likely to get, when all is done."

This moved Nello's spirits, for of all things in the world, there is nothing that so excites opposition among great or little, as a claim upon our gratitude. Anything and everything else the mind may concede, but even a child kicks against this demand. Nello's feelings towards his uncle were not unkind; but, little as he was, instinct woke in him an immediate resistance.

"It was not me that did it," he said; "it was you. I should have stayed at home, and when the old gentleman is better, he would have come out and played with me. And Mary would have let me stay. I like home," said Nello, "and perhaps I shall not like school; but if I don't like it," he added, brightening and forgetting the secret he had been so sworn to keep, "I know how to get away."

"How shall you get away?" said Randolph. But he was so sure of this matter, which was in his own hands, that he did not wait for any answer. "They will take care of that at school," he said; "and it will be the worse for you, my boy, if you make yourself disagreeable. Come along, or we shall miss the train."

Nello saw that the basket had been placed under his seat as he got in; and as the train swept away from the station,

he caught a glimpse of the lonely figure of his new friend, standing among the little crowd that watched the departure. Bampfylde made a warning gesture to the child who, forgetful of precaution, nodded and waved his hand in reply.

"Who is that?" cried Randolph, suspiciously, getting up to cast a searching look behind.

"Oh, it is the man with the wild beasts," Nello said.

And then came another silent sweep through the green smooth country, which was not like the hilly north. It was all Nello could do to keep himself from pulling his basket from beneath his seat, and examining his new treasure. He could hear it rustling and fluttering its wings against the wickerwork. Oh, to be able to take it out, to give it some crumbs of biscuit which were still in his pocket, to begin to train it to know him! Nello only restrained himself painfully, by the thought that if he betrayed his own secret thus, his pigeon might be taken from him. How eager he was now to be there! "Are there many more stations?" he asked, anxiously; then counted them on his fingers—one, two, three. And how delighted he was when they came at last to the little place, standing alone in a plain, with no other house visible that Nello could see (but he did not look; he was so anxious about his pigeon) which was their journey's end. A kind of farmer's shandry, half cart, half gig, with a rough horse, and a rougher driver, was in waiting. Nello got his basket out with his own hands, and put his little greatcoat over it, so that no one could see. His heart beat loudly with fright, lest his uncle should hear the sounds beneath this cover—the rustle and flutter. But Randolph's mind was otherwise engaged. As for the boy, he thought of nothing but this treasure, which he was so happy to feel in his arms. He could carry it so, quite comfortably, with the little greatcoat over it; he neither remarked the rudeness of the jolting vehicle, nor the bare country, with here and there a flat line of road running between turnip and potato-fields. When they came to the house—a new, square house, in the middle of the fields—Nello thought nothing about it one way or another. He thought, "I wonder which will be my

window; I wonder where I can keep the bird." That was all. His little soul, all eagerness after his new delight, had room for nothing more.

Randolph and his charge were taken into a plain room, very simply furnished, and not over-dainty in point of cleanliness, where the principal of the school, a man in rusty black, came to receive them. There was nothing repulsive in his looks, nothing more in any way than the same plain unvarnished rusticity and homeliness which showed in his house. The school was intended for farmers' sons, and the education was partly industrial—honest, simple training, without either deceit or villany involved, though not at all suitable for Nello. It was with reluctance even that so young a boy had been accepted at all; and the schoolmaster looked at him with doubtfulness, as the slim little curled darling, so different from his other pupils, came in, hugging his basket.

"He's young, and he's small," said Mr. Swan.

"Very young, and small for his age," Randolph echoed. "All the more reason why he should lead an out-of-door life, and learn that he is a boy, and will one day be a man."

Then Nello was put into the hands of the principal's wife, while Randolph gave further directions.

"His case is quite peculiar," the uncle said. "He is an orphan, or as good as an orphan, and I took him from the hands of ladies who were making a fool of the boy. What he wants is hardening. You must not be led away by his delicate looks; he is a strong boy, and he wants hardening. Send him out to the fields, let him learn to work like the rest, and don't listen to any complaints. Above all, don't let him send complaints home."

"I never interfere with what they write home," said honest Mr. Swan.

"But you must in this case. If he sends home a complaining letter, his aunt will rush here next morning and take him away. I am his uncle, and I won't permit that—and a family quarrel is what will follow, unless you will exercise your discretion. Keep him from writing, or keep him from grumbling. You will be the saving of the boy."

"It is a great responsibility to undertake. I should not have undertaken it, had I known——"

"I am sure you have too serious a sense of the good that can be done, to shrink from responsibility," said Randolph; "but, indeed, are we not all responsible for everything we touch? If you find him too much for you, write to me. Don't write to what he calls home. And do not let him be taken away without my authority. I have to protect him from injudicious kindness. A parcel of women—you know what harm they can do to a boy, petting and spoiling him. He will never be a man at all, if you don't take him in hand."

With these arguments, Randolph overcame the resistance of the schoolmaster, and with redoubled instructions that it was himself that was to be communicated with, in case of anything happening to Nello, went away. He was in haste to get back for his train; and "No, no," he said, "you need not call the boy—the fewer partings the better. I don't want to upset him. Tell him I was obliged to hurry away."

And it would be impossible to describe with what relief Randolph threw himself into the clumsy shandry, to go away. He had got the boy disposed of—for the moment at least—where no harm could happen to him, but also where he could do no harm. If his grandfather regained his consciousness, and remembering that freak of his dotage called again for the boy, it would be out of Mary's power to spoil everything by humoring the old man, and reviving all those images which it would be much better to make an end of. And when the squire's life was over, how much easier to take all those measures, which it was so advisable to take, without the little interloper about, whom foolish people would no doubt insist on calling the heir. The heir! let him stay here, and get a little strength and manhood, to struggle for his rights, if he had any rights. More must be known of him than any one knew as yet, Randolph said to himself before he, for one, would acknowledge him as the heir.

Nello was taken into Mrs. Swan's parlor, and there had some bread and butter offered to him, which he accepted

with great satisfaction. The bread was dry and the butter salt, but he was hungry, which made it very agreeable.

"You'll have your tea with the rest at six," said Mrs. Swan; "and now come, I'll show you where you are to sleep. What is that you're carrying?"

"A basket," said Nello, in the mildest tone; and she asked no further questions, but led him up stairs, not however to the little bedroom of which the child had been dreaming where he could keep his new pet in safety, but to a long dormitory, containing about a dozen beds.

"This is yours, my little man, and you must be tidy and keep your things in order. There are no nurses here, and the boys are a bit rough; but you will soon get used to them. Put down your things here; this chair is yours, and that washing-stand, and——"

"Must I sleep there?" cried Nello. It was not so much the little bed—the close neighborhood of the other boys—that appalled him; but where was there a window for his bird. "Mayn't I have that bed?" he said, pointing to one which stood near the window at the end of the room.

"I daresay," said Mrs. Swan; "why that is for the head boy, and you are the least, and the last. It is only by a chance that there is room for you at all here."

"But I don't want to be here," said Nello. "Oh, mayn't I be by the window? The head boy hasn't got a——. What would it matter to him? but I want to be there. I want to be at the window."

"My little master, you'll be where I choose to place you," said Mrs. Swan, becoming irritated. "We allow no self-will, and no rebellion here."

"But what shall I do with my ——" Nello did not venture to name the name of the bird. He crept up to the head of the little bed which was to be allotted to him, and surveyed the blank wall, tearfully. There was but a very little space between him and the next bed, and he was in the middle of the room, the darkest part of it. Nello began to cry. He called upon Mary, and upon Martuccia, in his heart. Neither of them would suffer him to be treated so. "Oh, mayn't I go to another room where there is a window?" he cried, through his tears.

"My word, that one is a stubborn one; you will have your hands full with him," said Mrs. Swan, leaving Nello to have his cry out, which experience had taught her was the best way. She found her husband very serious, and full of care, thinking over the charge he had received.

"It's a gentleman's son, not one of the commoner sort," he said; "but why they should have brought him to me—such a little fellow—is more than I can see."

Nello sat by his little bed and cried. His heart was full, and his little frame worn out. In the state of depression which had followed upon the delight of the morning, novelty had departed, and strangeness had come in its place—a very different matter; everything was strange wherever he turned; and no place to put his pigeon! By and by the vacant spaces would fill, and boys—boys whom he did not know—big boys, rough boys, and that head boy, who had the window, would pour in; and he had no place to put his bird.

Nello's tears fell like summer rain upon the precious basket, till the storm had worn itself out. Then, first symptom of amelioration, his ear was caught by the rustle of the bird in the cage. He took it up, and placed it in his lap, then opened the cover a little way, and, entrancing moment! saw it—the glossy head, the keen little eye gleaming at him, the soft ruffled feathers. It made a small dab at him as he peered in—and oh, how delighted, how miserable, how frightened was Nello! He drew back from the tiny assault, then approached his head closer, and took from his pocket a bit of his bread and butter, which he had saved on purpose. Then he sat down on the floor, a small creature, scarcely visible, hidden between the beds, betraying himself only by the reverberation of the sob which still shook his little bosom from time to time, entranced over his bird. The pigeon gurgled its soft coo, as it picked up the crumbs. The little boy, after his trouble, forgot everything but this novel delight; a thing all his own, feeding from his hand already, looking up at him side-long, with that glimmer of an eye, with a flutter towards him if it could but have got loose. No doubt when he set it free

it would come upon his shoulder directly. Nello lost himself and all his grief in pleasure. He forgot even that he had not a window in which to hang his bird.

By and by, however, there came a rush and tramp of feet, and eleven big boys, earthy and hot from the field where they had been working, came pouring in. They filled the room like a flood, like a whirlwind, catching Nello upon their surface as the stream would catch a straw. One of the big, hobnailed fellows, stumbled over him as he sat on the floor.

"Hallo, what's here?" he cried; "what little kid are you?" seizing the child by the shoulders. He did not mean any harm, but grasped the little boy's shoulder with the grasp of a playful ploughman. Then there was a rush of the whole band to see what it was. The new boy! but such a boy—a baby—a gentleman baby—a creature of a different order.

"Let's see him," they cried, tumbling over each other, while Nello dragged to his feet, stood shrinking, confronting them, making trial of all the manhood he possessed. He would not cry; he drew back against his bed, and doubled his little fist, his heart heaving, his lip quivering.

"I have done no harm," said Nello, with a sob in his voice, and the head boy called out, good-humoredly enough, though the thunder of his boyish bass sounded to Nello like the voice of doom, to "let him be."

"What's he got there?" he asked.

The basket was snatched from the child's hand, notwithstanding his resistance. Nello gave a great cry when it was taken from him.

"Oh, my bird, my pigeon, my bird!—you are not to hurt my bird."

"Give it here," said the head boy.

But the first who had seized the treasure held it fast.

"I've got it, and I'll keep it," he cried.

"Give it here," shouted the other.

The conflict and the cloud of big forms, and the rough voices and snatchings, filled Nello with speechless dismay. He leaned back against his bed, and watched with feelings indescribable the basket which contained his treasure pulled and dragged about from one to another. First the handle gave way,

then the lid was torn off, as one after another snatched at it. Oh, why was Nello so small and weak, and the others so big and strong!

"Give it here," shouted the head boy; but, in the midst of the scuffle, something happened, which frightened them all—the bird got loose, carefully as it had been secured, flew up over their heads, fluttered for a moment, driven wild by the cloud of arms stretched out to catch it, and then, with a sweep of its wings, darted out through the open window, and was seen no more.

CHAPTER XXX.

A CHILD FORLORN.

NELLO sobbed himself to sleep that night, scarcely conscious of the hubbub that was going on around him. He had watched with a pang unspeakable the escape of his bird, then had rushed blindly among the culprits, fighting and struggling in a passion of tears and childish rage, raining down harmless blows all round him, struggling to get out after it, to try to bring it back. Then Nello had been caught, too desperate to know who held him, in the hands of the head boy, who paid no more attention to his kicks and struggles than to his cries, and held him until, half dead with passion and misery, the poor little fellow sank exhausted, almost fainting, in the rough hands of his captors. Then the boys, who were not cruel, laid him on his bed and summoned Mrs. Swan. They all crowded round her to tell their story. Nobody had meant any harm. They had taken his basket to look at it, and the pigeon had got loose. "And it was a carrier!" the head boy said, regretfully. They were as sorry as Nello could be, though by this time, under the combined influences of loneliness, desolation, homesickness, weariness, and loss, poor little Nello was almost beyond feeling the full extent of his troubles. "He's a mammy's boy," said Mrs. Swan, who was rough but not unkind. "He has never been at school before. A spoiled child, by all I can see." But why had a spoiled child been sent here? This was what the good woman could not understand. Nello slept and forgot his woes; and when he was woke in the morning by the tumult, all the

eleven jumping out of bed at once, performing their noisy but scanty ablutions, tossing boots about, and scrambling for clothes, the child lay trembling yet anxious and half amused in spite of himself. The rough fun that was going on tempted Nello to laugh, though he was miserable. He shrank from them all, so big, so loud, so coarsely clothed, and in such a hurry; but he was tickled by their horse-play with each other—the hits and misses with which their missiles went and came. When the head boy was caught by a pillow straight in the face as he approached to execute justice upon one of the laggards, Nello could not restrain a little broken chuckle, which attracted the attention of the combatants. This, however, drew upon him the arrest of fate. "I say, little one, ain't you going to get up? bell's rung!" said his next neighbor. The head boy was aggrieved by the poor little laugh. "Get up, you lazy little beggar!" he cried. "I say, let's toss him!" cried another, with sudden perception of fun to be had easily. The boys meant no particular harm; but they made a simultaneous rush at the little trembling creature. Nello felt himself seized, he knew not for what purpose. Then the noise, and the rude, laughing faces—which looked to him in his fright like demons—all swam in giddy uncertainty round him, and the poor little fellow came down upon the floor, slipping out of their rough and careless hands, faint and sick and sore, his head turning, his little bones aching. But though in his giddiness and faintness he scarcely saw anything—even the faces turning into misty spectres—Nello's spirit survived for a moment the collapse of his little frame. He got to his feet in a frenzy, and struck out at them with his white little childish fists. "I will kill you!" cried Nello, through his teeth; and a great horse-laugh got up. But this was soon extinguished in dismay and horror when the little fellow fell back fainting. They all gathered round, horror-stricken. "Lift him on his bed," said the head boy, almost in a whisper. They did not know anything about fainted; they thought the child was dead. Then there was a pause. In their horror it occurred to more than one inexperienced imagination to hide the little body and run

away. "What can they do to us?" said another, awe-stricken. "We didn't mean it." For a moment the boys had all that thrill of horrible sensation which ought to (but, it would seem, does not always) accompany homicide. At the end, however, humanity prevailed over villanous panic, and Mrs. Swan was called to the rescue. The boys were too glad to troop away, already subject to punishment on account of being late, and, huddling together, went down to the schoolroom in a band, where vengeance awaited them—though not for Nello's murder, as some of them thought.

Nello came to himself at last, after giving Mrs. Swan a great deal of trouble; and there was nothing for it but to leave him in bed all day; for the child was bruised with the fall, aching in every limb, and too resentful and wretched to make any effort. He lay and cried and brooded, what between childish plans of vengeance and equally childish projects of escape. Oh, the pangs of impotence with which the small boy wronged contemplated the idea of those big fellows who had been so cruel to him! How should weakness be aware that strength does not intend to be cruel? Nello could [not be tolerant or understanding at his age, even if there had not been his aching bones to prove the wickedness of his assailants. He hated them all. How could he help hating them? He lay and planned what he would do to them. But Nello's dreams were not malicious. At the last moment, when they had suffered torments of dread in prospect of the punishment which he permitted them (in his fancy) to see approaching, Nello's vengeance suddenly turned into maganimous contempt. He would not condescend to reprisals; he would crush them with forgiveness as soon as they saw his power. Such were the plans which the child lay and concocted, and which amused him, though he was not aware of it. But when the boys came in Nello shrank to the farther side of his bed; he would not look at them; he would not listen to their rough inquiries. When they went away again, however, and he was left alone, a sudden fit of longing came over him. Oh, to see somebody he knew! somebody that was kind! Schemes of vengeance

pall, like every other amusement. He gazed round upon the bare walls, the range of beds, the strange, ugly, desolate place. He could not tell if it was worse when the savages were there, filling it with noise, stumblings of heavy feet, cries of rough voices, or when the sounds all died away, and he was left lonely, not a soul to speak to him; no kind hand to touch his hot little head; nobody to give him a drink, though he wanted it so much. Nello had to clamber out of bed, to pour himself out a cup of water from the great brown jug, which he could scarcely lift—and fell upon his bed, again, utterly heartsick and desolate. Nobody to give him a drink! How they used to pet him when he had a headache! How Martuccia would croon over him, and bathe his head, and kiss his hands, and bring him everything she could think of to please him! And Mary would come and stand by his side, and put her cool, white hand upon his head—that hand which he had once called “as soft as snow.” Nello remembered the smile that came on Mary’s face when he had called her hand “as soft as snow.” He did not himself see the poetry of the phrase, but he thought he could feel again that mingled coolness, and softness, and whiteness. And Lily! Lily would sit by him all day long, and read to him, or sing to him, or tell him stories, or play when he got a little better, and could play. A great lump came in Nello’s throat. “Oh, my Lily!” he cried, with a lamentable cry. He had no mother to appeal to, poor child—not even the imagination of a mother. Lily had been everything. Nothing had ever been so bad with him but could be borne when Lily was there. Naturally he had not so much felt the want of Lily when it was pleasure (as he thought) that he was going to. He could part with her without much emotion in the excitement of novelty and childish hope; but now—Nello turned his face to the wall and sobbed. The lonely place—all the lonelier for bearing traces of that rude multitude—held him, a little atom, in its midst. Nobody heard his crying, or cared. He tore the bedclothes with little frantic hands, with that sense of the intolerable which comes so easily to a child. But what did it matter that it was intoler-

able? Little Nello, like older people, had to bear it all the same.

It was best to leave the child quiet, the Swans thought. They were not unkind, but they were not used to take much trouble. The boys who came to them generally were robust boys, able to take care of themselves, and to whom it did no harm to be hustled about—who enjoyed the scrimmages and struggles. Mrs. Swan had her own children to look after. “I’ve left him to himself; he’s better to be quite quiet,” she said to her husband, and the husband approved; “far better for him to be quiet.” Attempts to amuse a child, in such circumstances, would have been foolish, they thought, and as for petting and sympathising with him, far better that he should get accustomed to it, and make up his mind to put up with it like the rest. They could not make any difference between one and another; and if he had a day’s rest, and was allowed to lie in bed, what could the child want more? There was no imagination in the house lively enough to *envisager* the circumstances from Nello’s point of view, or to understand what chills of terror, what flushes of passion came over the child, when the others poured in to bed again in the evening, driving him desperate with fear, and wild with anger. Who could imagine anything so vehement in the mind of such a little boy? But Nello was not molested that next evening; they were disposed rather to be obsequious to him, asking, in their rough way, how he was, and offering him half-eaten apples, and bits of sticky sweetmeats, by way of compensation. But Nello would not listen to these clumsy overtures. He turned his face to the wall persistently, and would have nothing to say to them. Even the tumult that was going on did not tempt him to turn round, though after the first moment of fright, the crowd in the room was rather comforting than otherwise to Nello. The sound of their voices kept him from that melancholy absorption in himself.

Next morning he had to get up, though he was still sick and sore. Nello was so obstinate in his refusal to do so, that the master himself had to be summoned. Mr. Swan would stand no nonsense.

"Get up, my boy," he said, "you'll get no good lying there. There has nothing happened to you more than happens to new boys everywhere. Come, you're not a baby to cry. Get up and be a man."

"I want to go home," said Nello.

"I daresay you do; but you're not going home. So your plan is to make the best of it," said the schoolmaster. "Now come, I let you off yesterday; but I'll send a man to take you out of bed if you don't get up now. Come along, boy. I see you want to be a baby as your uncle said."

"I am no baby," cried Nello, furious; but the schoolmaster only laughed.

"I give you half-an-hour," he said; and in half-an-hour, indeed, Nello, giddy and weak, managed to struggle down to the schoolroom. His watch was no longer going. He had forgotten it in the misery of the past day; it lay there dead, as Nello felt—and his bird was flown. He stumbled down stairs, feeling as if he must fall at each step, and took his seat on the lowest bench. The lessons were not much, but Nello was not equal to them. The big figures about seemed to darken the very air to the boy, to darken it, and fill it up. He had no room to breathe. His hand shook, so that he could not write a copy, which seemed a simple matter enough. "Put him at the very bottom; he knows nothing," Mr. Swan said to his assistant; and how this galled the poor little gentleman, to whom, in his feebleness, this was the only way left of proving a little superiority, what words could say? Poor little Nello! he cried over the copy, mingling his tears with the ink, and blurring the blurred page still more. He could not get the figures right in the simplest of sums. He was self-convicted of being, not only the least, but the very last; the dunce of the school. When the others went out to play, he sat wretched in a corner of the wretched schoolroom, where there was no air to breathe. He had not energy enough to do anything or think of anything, and it was only the sight of another boy, seated at a desk writing a letter, which put it into his head that he too might find a way of appeal against this cruelty. He could not write anything but the largest of large hands. But he tore a leaf out of the

copybook, and scrawled a few lines across it. "I am verrey meeserble," he wrote; "oh, Lily, ask Mary to come and take me home."

"Will you put it into a cover for me?" he said to the boy who was writing, who proved to be the very head boy who reigned over Nello's room. "Oh, please, put it into a cover. I'll forgive you if you will," cried Nello.

The head boy looked at him with a grin.

"You little toad, don't you forgive me without that? I never meant to hurt you," he said; but melting, he added, "give it here." Nello's epistle, written across the lined paper, in big letters, did not seem to require any ceremony as a private communication. The head boy read it and laughed. "They won't pay any attention," he said; "they never do. Little boys are always miserable. And won't you catch it from Swan if he sees it!"

"It is for my sister Lily; it is not for Mr. Swan," cried the child, upon which the head boy laughed again.

That letter never reached Penninghame. The schoolmaster read it, according to his orders, and put it into the fire. He wrote himself to the address which Nello had given, to say that the little gentleman was rather homesick, but pretty well; and that perhaps it would be better, in the circumstances, not to write to him till he had got a little settled down, and used to his new home. He hoped his little pupil would soon be able to write a decent letter; but he feared his education had been very much neglected hitherto, Mr. Swan wrote. Thus it came to pass that Nello lived on, day after day, eagerly expecting some event which never happened. He expected, first of all, Mary to arrive in a beautiful chariot, such as was wont to appear in Lily's stories, with beautiful prancing horses—(Where they were to come from, Nello never asked himself, though he was intimately acquainted with the two brown ponies and the cob, which were all the inhabitants of the squire's stables), and with an aspect splendid, but severe, to proceed to the punishment of his adversaries. Nello did not settle what deaths they were to die; but all was arranged except that insignificant circumstance. Mary would

come; she would punish all who had done wrong; she would give presents to those who had been kind; and all the boys, who had laughed at little Nello, would see him drive away glorious behind those horses, with their arching necks, and high-stepping, dainty feet. Then after a few days, which produced nothing, Nello settled with a pang of visionary disappointment, that it was Mr. Pen who would come. He would not make a splendid dash up to the door like Mary in her chariot; but still he would deliver the little captive. Another day, and Nello coming down and down in his demands, thought it might at least be Martuccia, or perhaps Miss Brown, who would come for him. That would not be so satisfactory to his pride, for he felt that the boys would laugh and jeer at him, and say it was his nurse who had come; but still even Miss Brown would be good to see in this strange place. At the end of the week, however, all Nello's courage fled. He thought then faintly of a letter, and watched when the postman came with packets of letters for the other boys. He could not read writing very well; but he could make it out if they would only write to him. Why would not they write to him? Had they forgotten him altogether, clean forgotten him, though he had been but a week away?

Nello did what he was told to do at school; but he was very slow about it, being so little, and so unused to work—for which he was punished; and he could not learn his lessons for brooding over his troubles, and wondering when *they* would come, or what they could mean; and naturally he was punished for that too. The big boys hustled him about; they played him a hundred tricks; they laughed at his timid, baby-washings, his carefulness, the good order to which he had been trained. To toss everything about, to do everything loudly and noisily, and carelessly, was the religion of Mr. Swan's boys, as everything that was the reverse of this had been the religion in which Nello was trained. Poor little boy, his life was as full of care as if he had been fifty. He was sent here and there on a hundred errands; he had impositions which he could not learn, and lessons which he could not write; and not

least, perhaps, meals which he could not eat; and out-of-door tasks quite unsuitable for him, and which he could not perform. He was for ever toiling after something he ought to have done. He grew dirty, neglected, unkempt, miserable. He could not clean his own boots, which was one thing required of him; but plastered himself all over with mysterious blacking, in a vain attempt to fulfil this task. He who had scarcely dressed himself till now, scarcely brushed his own hair. He kept up a struggle against all these labors, which were more cruel than those of Hercules, as long as he had the hope within him that somebody must come to deliver him; for, with a childish jump at what he wished, he had believed that some one might come "to-morrow," when he sent, or thought he sent, his letter away. The to-morrow pushed itself on and on, hope getting fainter, and misery stronger, yet still seemed to gleam upon him a possibility still. "Oh, pray God send Mary," he said, every night and morning. When a week was over, he added a more urgent cry, "Oh, pray God send *some one*, only *some one*! Oh, pray God take me home!" the child cried. He repeated it one night aloud, in the exhaustion of his disappointment, with an irrepressible moaning and crying, "Oh, pray God take me home!" He was very tired, poor little boy; he was half wrapped in his little bit of curtain, to hide him as he said his prayers, and he had fallen half asleep while he said them, and was struggling with drowsiness, and duty, and a hope which, though now falling more and more into despondency, still gave pertinacity to his prayer. He was anxious, very anxious to press this petition on God's notice. Repetition, is not that the simplest primitive necessity of earnest supplication? Perhaps God might not take any notice the first time, but He might the next. "Oh, take me home. Oh, pray God take me home!" God, too, like Mary and the rest, seemed to pay no attention; but God did not require written letters or directions in a legible hand: He could be approached more easily. So Nello repeated and repeated, half asleep, yet with his little heart full of trouble, and all his cares awake, this appeal to the only One who could help

him, "Oh, pray God, pray God take me home!"

But in this trance of beseeching supplication, half asleep, half conscious, poor little Nello caught the eye of one of his room-fellows, who pointed out this spectacle to the rest. "Little beggar! pretending to say his prayers; and much he cares for his prayers, going to sleep in the middle of them," they said. Then one wag suggested, "Let's wake him up!" It was a very funny idea. They got his waterjug, a small enough article indeed, not capable of doing very much harm. Had poor little Nello been less sleepy in his half-dream of pathetic appeal, he must have heard the titterings and whisperings behind him; but he was too much rapt in that drowsy, painful abstraction, to take any notice, till all at once he started, bolt upright, crying and gasping, woke up and drenched by the sudden dash of cold water over him. A shout of laughter burst from all the room, as Nello turned round frantic, and flew at the nearest of his assailants with impotent rage. What did the big fellow care for his little blows? he lay back and laughed and did not mind, while the small creature, in his drenched nightgown, his face crimson with rage, his little frame shivering, his curly locks falling about his cheeks, flew at his throat. The head boy, however, awakening to a sense of the indiscretion, and perhaps touched by a pang of remorse at sight of the misery and fury in the child's face, got hold of Nello in his strong arms, and plucked the wet garment off him, and threw him into his bed. "Let the child alone, I tell you. I won't have him meddled with," he said to the others—and covered him up with the bedclothes. Poor little Nello! he wanted to strike at and struggle with his defender. He was wild with rage and misery. His small heart was full, and he could bear no more.

After this, however, the boys, half-ashamed of themselves, got quickly to bed; and darkness, and such silence as can exist in the heavy atmosphere, where twelve rustics sleep and snore, succeeded to the tumult and riot. Nello, exhausted, sobbed himself to sleep under the bedclothes; but woke up in the middle of the night to remember all his wrongs and his misery. His cup was full; even

God would not pay any attention to him, and it seemed to Nello that it would be better to die than to bear this any longer. Though the dark frightened him, it was less alarming than the rough boys, the hard lessons, the pangs of longing and waiting for a deliverance which never came. He had still the sovereign which Mary gave him, and the watch he had been so proud of, though that was dead now, and he had not spirit enough left to wind it up. It was October, and the nights were long. Though it was in reality between two and three o'clock in the morning, Nello thought it would soon be time for all these savage companions to get out of bed again, and for the noisy dreadful day to begin. He got up very quietly, trembling at every sound. There was a window at the end of the room through which the moon shone, and the light gave him little consolation. He kept his eye fixed upon it, and groped for his clothes, and put them on very stealthily. If any one should hear him, he would be lost; but Nello's little rustlings, like a bird in the dark, what were they to break the slumbers of all those out-door lads, who slept violently, as they did everything else? No one stirred; the snoring and the breathing drowned all the little misadventures which chilled Nello with terror, as when his boots dropped out of his hand, or the buttons on his trousers struck shrilly against the chair. Nothing happened; nobody stirred, and Nello crept out of the room, holding his breath with the courage of despair. He got down stairs, trembling and stumbling at almost every step. When he got to the lower story, that kind moon, which had seemed to look at him through the window, almost to smile at him in encouragement and cheerful support, showed him a little window which had been left open by some chance. He clambered through, and found himself in the garden. There was a great dog in front of the house, of whom Nello was in mortal terror; but here at the back there was no dog, only the kitchen garden, with the tranquil breadth of a potato-field on the other side of the hedge. It was not easy to get through that hedge; but a small boy of nine years old can go through gaps which would scarcely show to the common eye. It scratched him.

and tore his trousers; but there was nothing in such simple accidents to stop the little fugitive. And what it was to feel himself outside, free and safe, and all his tormentors snoring! Nello looked up at the moon, which was mellow and mild, not white as usual, and which seemed to smile at him. The potato-field was big and black, with its long lines running to a point on either side of him; and the whole world seemed to lie round him dark, and still nothing stirred, except now and then a rat in the ditch, which chilled Nello with horror. Had he known it was so early, the child would have been doubly frightened; but

he felt that it was morning, not night, which encouraged him. And how big the world was! how vast, and silent, and solitary! only Nello, one little atom, with a small heart beating, a little pulse throbbing in the midst of that infinite quiet. The space grew vaster, the stillness more complete, the distance more visionary, and there was a deeper sable in the dark, because of Nello's little heart beating 'so [fast, and his eyes that took everything in. What was he to do, poor little soul, there by himself in the open country, in the unknown world, all in the middle of the night?

[To be continued.]

GERMAN SOCIETY FORTY YEARS SINCE.

BY LADY DUFF GORDON.

IN 1841-3 Mrs. Austin was in Germany, and met most of the celebrated men and women of that epoch. Some of the stories jotted down by her during a prolonged residence in Dresden and Berlin seem too good to be lost, while others show considerable insight into German life. The brothers Grimm appear to have been the most sympathetic people she met in Berlin. About Jacob Grimm she writes thus:—

"His exterior is striking and engaging. He has the shyness and simplicity of a German man of letters, but without any of the awkward, uncouth air which is too common among them. His is a noble, refined head, full of intelligence, thought, and benevolence, and his whole exterior is full of grandeur—at the same time perfectly simple. Wilhelm is also a fine-looking man, younger, fatter, and more highly-colored; less imposing, less refined, but with a charming air of good-nature, *bonhomie* and sense. His wife is also very pleasing. I met him one night at tea, and we began talking of fairy tales; I said, 'Your children appear to me the happiest in the world; they live in the midst of *Mährchen* (fairy tales).' 'Ah,' said he, 'I must tell you about that. When we were at Göttingen somebody spoke to my little son about his father's *Mährchen*. He came running to me and said with an offended air, 'Vater, man sagt du hast die *Mährchen* geschrieben—nicht wahr, du hast nicht

solches Dummezeug gemacht?' ('Father, people say that you have written the fairy tales—surely you never invented such rubbish?') He thought it below my dignity," said Grimm. Somehow the child had never seen or attended to the fact of his father's authorship."

Another story of Grimm's:—

"When I was a young man I was walking one day and saw an officer in the old-fashioned uniform. It was under the old Elector. The officers still wore pigtails, cocked hats set over one eye, high neckcloths, and coats buttoned back. As he was walking stiffly along, a groom came by riding a horse which he appeared to be breaking in. 'What mare is that you are riding,' called out the major with an authoritative, disdainful air. 'She belongs to Prince George,' answered the groom. 'Ah—h!' said the major, raising his hand reverentially to his hat with a military salute, and bowing low to the mare. I told this story," continued Grimm, "to Prince B. thinking to make him laugh. But he looked grave, and said, with quite a tragic tone of voice, 'Ah, that feeling is no longer to be found!'"

"Jacob Grimm told me a *Volksmärchen* too:—

"'St. Anselm was grown old and infirm, and lay on the ground among thorns and thistles. *Der liebe Gott* said to him, 'You are very badly lodged there; why don't you build yourself a house?'"

"Before I take the trouble," said Anselm, "I should like to know how long I have to live." "About thirty years," said *der liebe Gott*. "Oh, for so short a time," replied he, "it's not worth while," and turned himself round among the thistles.

"Bettina von Arnim called, and we had a *tête-à-tête* of two hours. Her conversation is that of a clever woman, with some originality, great conceit, and vast unconscious ignorance. Her sentiments have a bold and noble character. We talked about crime, punishment, prisons, education, law of divorce, &c., &c. Gleams of truth and sense, clouds of nonsense—all tumbled out with equally undoubting confidence. Occasional great fidelity of expression. Talking of the so-called happiness and security of ordinary marriages in Germany, she said, 'Qu'est que cela me fait? Est-ce que je me soucie de ces nids qu'on arrange pour propager?' I laughed out; one must admit that the expression is most happy. She talked of the ministers with great contempt, and said, 'There is not a man in Germany; have you seen one for whom you could feel any enthusiasm? They are all like frogs in a big pond;—well, well, let them splash their best. What have we to do with their croaking?' Some things she said about the folly of attacking full-grown, habitual vice, by legislation, prison discipline, &c., were very true, and showed a great capacity for just thought. But what *did* she mean, or what did Schleiermacher mean, for she quoted him, by saying, 'la péché est une grâce de Dieu?' These are things people say to make one stare.—Among other divorce cases we talked of was the following:—Herr S—, a distinguished man, between fifty and sixty, with grown-up children and a wife who for five-and-twenty years had stood by his side a true and faithful partner through good and evil fortune—especially a great deal of the latter. A certain Madame A—, a woman about thirty, *bien conservée*, rather pretty, and extremely coquettish, made it her business to please Mr. S—, and succeeded so well that he soon announced to his wife his desire to be divorced from her, and to marry Madame A—, who on her side was to divorce her husband. Poor Madame S— could hardly believe her

senses. She was almost stupefied. She expostulated, resisted, pleaded their children—marriageable daughters—all in vain. Mr. S— said he could not be happy without Madame A—. In short, as may be imagined, he wore out his wife's resistance, and the blameless, repudiated, and heart-broken wife took her children and retired into Old Prussia. Madame A— then became Madame S—. But the most curious thing was that the *ci-devant* husband remained on terms of the greatest intimacy, and became the tame cat of the house. When Mr. S— went a journey his wife accompanied him a certain way, and Mr. A— went with them to escort her back, as a matter of course.

"At a ball given at C—, Mr. and Madame S— were invited. He came alone, and apologised to the lady of the house about his wife's absence. She hoped Madame S— was not ill. 'Oh no; but Mr. A— has just arrived, and you understand she could not leave him alone the first evening.'

"My maid Nannie told me a curious illustration of the position of servants here. The maid belonging to the master of the house, has, it seems, a practice of running out, and being gone for hours without leave. On Sunday last she had leave; Monday, ditto; Tuesday, ditto; and was out the whole of those evenings. Wednesday she took leave, and did not return till after ten. Her mistress asked her where she had been; she refused to answer, on which her mistress pressed her. 'Well,' she said, 'if I won't tell you, you can't hang me for it.' With which answer the lady went away content. Another day the master, who is lame, came down into the kitchen and said, 'I have left my spectacles; I wish you would run up for them.' 'Oh,' said she, 'I am washing dishes.' The droll thing is that they said they are only too glad to have this steady and obliging person, because she is honest—a thing almost unknown here.

"A great many ladies in Berlin have evenings on which they receive—especially the ministers' wives—not their friends, but all the world. If you don't go for two or three weeks, they tell you of it—the number of omissions is chalked up against you. Nor, except in two or three of the more exotic, can you look in

for half-an-hour and come away. People ask you why you go, and where you are going to. In many houses you are expected to take leave. Then you have the satisfaction of being told, where you were last night, and what you said; who sat next you, and especially that you did not admire Berlin, or something in it. Of course you deny, equivocate, palliate, lie. If you have the smallest pretension to be *vornehm* (fine), you can only live Unter den Linden, or in the Wilhelms-strasse.

"Social life does not exist in Berlin, though people are always in company, and one is, as Ranke said; *gehetzt* (hunted). In the fashionable parties one always sees the same faces—faces possessed by *ennui*. The great matter is for the men to show their decorations and the women their gowns, and to be called *excellency*. Generally speaking, it strikes me that the Prussians have no confidence in their own individual power of commanding respect. Much as they hold to all the old ideas and distinctions about birth, even that does not enable them to assume an upright independent attitude, not even when combined with wealth. Count G——, a man of old Saxon nobility, with large estates and the notions and feelings of an English aristocrat, tells me that he is completely *shouldered* in Berlin society, because he neither has nor will have any official title, wears no orders, and, in short, stands upon his own personal distinctions. The idea of going about the world stark naked to one's mere name. Mr. Pitt, Mr. Fox, Mr. Canning—a German would be ashamed!

"The other day I went up three pair of stairs to call on a nice little professor's wife. Arrived at the top, I rang the bell, and out comes a great hulking maid, who looks down upon me from a height of three or four steps. 'Is Madame G—— at home?' Answer (stereotype) 'I don't know;' after a pause—'Do you mean the Frau Professorin?' 'Yes, Madame G——.' On this out rushes a second maid, looks half stupid, half indignant—'What, do you mean the Frau Geheimrätin?' The joke was now too good to drop. I said again, 'I mean Madame G——, as it seems you do not hear distinctly; take my card to Madame G——.' I was admitted with the usual words, 'most

agreeable,' and found the very pleasant Frau Professorin Geheimrätin, for she is both, whose servants seem ashamed of her name. Yet it is a name very illustrious in learning.

"Till a man is *accroché* on the court by some title, order, office, or what not, he may be fairly said not to exist. The Germans are becoming clamorous for freer institutions, but how much might they emancipate themselves. A vast deal of this servility is perfectly voluntary, but it seems in the blood. They dislike the King of Hanover as much as we do; but when Madame de L—— whispered to me at a ball, 'Voilà votre Prince et Seigneur,' and I replied in no whisper, 'Prince oui, mais grâce à Dieu, Seigneur non.' She looked frightened, and so did all the ladies round her—and why? He could do them no more harm than me.

"In Dresden I met the Grand Duke of Saxe Weimar, who told me the following anecdote on the authority of his mother-in-law the Empress of Russia:—'When Paul and his wife went to Paris, they were called, as is well-known, le Comte and la Comtesse du Nord. The Comtesse du Nord accompanied Marie Antoinette to the theatre at Versailles. Marie Antoinette pointed out, behind her fan, *aussi honnêtement que possible*, all the distinguished persons in the house. In doing this she had her head bent forward; all of a sudden she drew back with such an expression of terror and horror that the Comtesse said, "Pardon, madame, mais je suis sûre que vous avez vu quelque chose qui vous agite." The queen, after she had recovered herself, told her that there was about the court, but not of right belonging to it, a woman who professed to read fortunes on cards. One evening she had been displaying her skill to several ladies, and at length the queen desired to have her own destiny told. The cards were arranged in the usual manner, but when the woman had to read the result, she looked horror-struck and stammered out some generalities. The queen insisted on her saying what she saw, but she declared she could not. "From that time," said Marie Antoinette, "the sight of that woman produces in me a feeling I cannot describe, of aversion and horror, and she seems studiously to throw herself in my way!"'

"The Grand Duke told very curi-

ous stories about a sort of second sight; especially of a Princess of S—— who was, I believe, connected with the House of Saxony. It is the custom among them to allow the bodies of their deceased relations to lie in state, and all the members of the family go to look at them. The Princess was a single woman, and not young. She had the faculty, or the curse, of always seeing, not the body actually exposed, but the next member of the family who was to die. On one occasion a child died, she went to the bedside and said, 'I thought I came to look at a branch, but I see the tree.' In less than three weeks the father was dead. The Grand Duke told me several other instances of the same kind. But this faculty was not confined to deaths. A gentleman whom the Grand Duke knew and named to me, went one day to visit the Princess. As soon as she saw him she said, 'I am delighted to see you, but why have you your leg bound up?' 'Oh,' said her sister, Princess M—— 'it is not bound up; what are you talking of?' 'I see that it is,' she said. On his way home his carriage was upset and his leg broken.

"I was saying that the Italians would not learn German. Madame de S—— said, 'I perfectly understand that; I had a French *bonne*, and when a child spoke French better than German. When the French were masters in Germany, M. de St. Aignan was resident at the court of Weimar. He and other French officers used to come every evening to my mother's house. I never spoke a word, I never appeared to understand a word. When the news of the battle of Leipzig arrived, M. de St. Aignan escaped through our garden. I was alone when he came to ask permission, and I answered him very volubly in French. "Mais, mademoiselle," said he, astonished, "vous parlez le Français comme l'Allemand. J'ai toujours cru que vous n'en comprenez pas un mot." "C'est que je n'ai pas voulu," replied I."

"This in a young girl who talked well and liked to talk, shows great resolution, and is a curious proof of the strength of the hatred of French rule.

"I went to see *Figaro's Hochzeit*, not *Le Nozze di Figaro*. If you have a mind to understand why the Italians can never be reconciled to Austrian rulers

go to see *Figaro's Hochzeit*. A Herr Dettmer, from Frankfurt, did Figaro, a good singer, I have no doubt, and not a bad, *i.e.*, an absurd, actor. But Figaro, the incarnation of southern vivacity, *espièglerie* and joyous grace! Imagine a square, thick-set man, with blond hair and a broad face, and that peculiar manner of standing and walking with the knees in, the heels stuck into the earth and the toes in the air, which one sees only in Germany. I thought of Piuco, a young Maltese, never, I believe, off his tiny island—whom I last saw in that part. I saw before me his *élancé* and supple figure, his small head clustered round with coal-black hair, his delicately turned jetty moustache, his truly Spanish costume, the sharp knee just covered by the breeches tied with gay ribbons, and the elastic step of the springing foot and high-bounding instep. What a contrast!—and what can Art do against Nature in such a case? Then the women; I had seen Ronzi de Begnis in the Countess. What a Countess! What a type of southern voluptuous grace, of high and stately beauty and indolent charm! Imagine a long-faced, Jackadaisical-looking German woman, lean and high-shouldered, and with that peculiar construction of body which German women now affect. An enormously long waist, laced in to an absurd degree, and owing its equally extravagant rotundity below to the tailor. 'Happy we,' says Countess Hahn-Hahn—'who, with so many ells of muslin or silk, can have a beautiful figure.'

"The Susanna was a pretty waiting-maid. How far that is from a Spanish Susanna, it is beyond me to say. Cherubino was the best, but he was only an *espiègle* boy playing at being in love—not the page whose head is turned at the sight of a woman. Then the language!

"After all, how immensely does this inaptitude of Germans to represent *Figaro* raise Mozart in our estimation; for he had not only to represent, but to conceive the whole—and what a conception. The sweet breath of the south vibrating in every note. Variety, grace, lightness, passion, *naïveté*, and, above all, a stately elegance which no one ever approached. His *Don Giovanni* and his *Almaviva* contain the most courtly, graceful, stately music that ever was con-

ceived; and nothing like it *was* ever conceived. Only the real grandee, courtier, and fine gentleman could express himself so.

"Now, as a set-off, I must say what Germans can do, and what I am quite sure we English cannot in these days.

"I went to see Schiller's *Braut von Messina*. I expected little. The piece is essentially lyric rather than dramatic. The long speeches, thought I, will be dull, the choruses absurd; the sentiments are pagan. What have Spanish nobles to do with a Nemesis, with oracles, with a curse, like that on the house of Athens—with sustained speeches, the whole purport of which is *incusare Deos*?

"Well, I was wrong. In the opening scene, Mademoiselle Berg has to stand for a quarter-of-an-hour between two straight lines of senators and to make a speech—*rien que cela*! Can anything be more difficult? Yet such was the beauty of her declamation of Schiller's majestic verse, such the solemnity and propriety, grace and dignity of her action, that at every moment one's interest rose. Her acting through the whole of this arduous part gave me the highest idea of her sense and culture. Tenderness and passion were nicely proportioned to the austere character and sculptural beauty of the piece. I cannot at this moment recollect ever to have seen an actress, French or English, who could have done it as well. Mademoiselle Rachel, with all her vast talents as a declaimer, would have been too hard for the heart-stricken mother.

"Emil Devrient's *Don Cesar* was quite as good. His acting in the last scene, where Beatrice entreats him to live, was *frightfully* good. The attempts at paternal tenderness, instantly relapsing into the fatal passion, ignorantly conceived, made one's heart stand still. And yet such was the extreme delicacy of his art, one felt none of the disgust which attends every allusion to such love. One saw before one only the youth vainly struggling with the hereditary curse of his house—the doomed victim and instrument of the vengeance of an implacable destiny.

"Anything more thoroughly heathenish than the play I cannot conceive, and I much question if an English audience

would sit it out—on that score—not to mention others. We should find it our duty to be shocked. The audience last night was thin; those who went were probably attracted by Schiller's name, and knew that such "horrid opinions" once existed in Greece, and that a poet imitating Greek tragedy might represent Greek modes of thinking. In short, we did not feel ourselves the least compromised by the Queen of Sicily's attack upon the gods—nor the least more disposed to quarrel with our fate.

"The Chorus is, as in duty bound, *versöhnend* (conciliatory). The amount of the comfort, it is true, often is, 'It can't be helped;' but even this is so nobly and beautifully expressed that one is satisfied. The Chorus has every imaginable claim to be a bore. They deal in good advice, moral reflections, and consolation of the new and satisfactory kind above mentioned. Yet so great is the majestic, harmonious, composed beauty of Schiller's verse, so much greater the eternal beauty of truth and virtue, that the old men's words fall on one's heart like drops of balm, and one feels calmed and invigorated for the struggle with life. The Chorus spoken, and in parts by all the voices at once, can never have a good effect—but somehow or other *cela allait*. Such are the triumphs of the true poet and artist."

The following anecdote dates from before the Russian emancipation:—

"The Archbishop of Erlau told me that at the time the Russian troops were stationed in Hungary, he and another gentleman were walking in the streets of — and suddenly heard a woman cry out. In a moment she ran into the street exclaiming that a Russian soldier had robbed or was about to rob her. Such complaints were very frequent and sometimes unfounded. The soldiers could not make themselves understood, and took up things without meaning to rob. Be that as it may, two Russian officers were passing and heard the woman's story. They instantly collared the man, threw him down on the pavement, and, without making the smallest inquiry into the facts, they then and there spurred him to death. This, said the Archbishop, I saw, with infinite horror and disgust."

Here we have a story which, though not absolutely new, is too good to be omitted:—

"Dr. F—— told me the following story of Voltaire, which I never met with before. Voltaire had for some reason or other taken a grudge against the prophet Habakkuk, and affected to find in him things he never wrote. Somebody took the Bible and began to demonstrate to him that he was mistaken. 'C'est égal,' said he, with an air of impatience, 'Habakkuk était capable de tout!'

"Two days before we left Dresden, as I was dressing to go out, Nannie, my maid, came into my room and said two ladies wanted to see me. She said she had never seen them—they said I did not know them. I sent to say that I was sorry but I could not receive them, as Madame de S—— was already waiting for me. Nannie came back with the answer that they would wait in the anteroom—they only wanted to speak to me for a moment. Annoyed at being forced to commit a rudeness, I hurried on my gown and went out. In the anteroom were a middle-aged lady and a young one. I broke out into apologies, &c., upon which the elder lady said, in German, 'Pardon me for being so pressing. I only wished to give my daughter strength for the battle of life.' I was literally confounded at the oddness of this address, and remained dumb. It seemed her daughter wished to translate from the English. After a short explanation she turned to her daughter, and pointing to me, said, 'Now, my dear, you have seen the mistress, so we will not keep her any longer.' And so they went. I threw myself into a chair, and, alone as I was, burst into an uncontrollable fit of laughter. This is as good a piece of Germanism as is to be found in any novel. Even my Dresden friends thought it quite amazing.

"Dr. Waagen and I were talking of the danger of disputing the authenticity of pictures. I said I had rather tell a man he's a rascal than that his pictures are copies. 'Yes,' said Waagen, 'I always compare a man, the genuineness of whose pictures is attacked, to a lioness defending her young.'

We afterwards came upon intercourse

with princes. Waagen said, Wilhelm von Humboldt, who was a great friend and patron of his when a young man, once said to him—'My dear friend, your position will probably bring you into frequent contact with royalty. Take one piece of advice from me; always regard them as wild beasts in cages, and the courtiers as keepers. You see how noble and gentle and beautiful they look. But if you begin to put your hand through the bars and play with them, then you'll feel their claws and fangs. Always ask the keepers first what sort of humour they are in.'

"Countess H——, wife of the Mecklenburg Minister, a Rubens beauty, and a very good-natured woman, told me she was invited to a grand dinner party at V—— to meet an English great lady. The hour was five. After everybody waiting till six, the hosts determined to sit down. Some time after dinner was begun, Lady —— came in. The hostess began to regret, hoped nothing had happened, &c.

"'Non, madame, c'est que je n'avais pas faim,' was the refined and graceful reply.

"At a dinner party we were talking of Niebuhr, Varnhagen von Ense's article, &c. They spoke of his arrogance and caprice, which they said he had in common with all Holsteiners. He was much disliked by the Germans at Rome, partly for these qualities, partly for his parsimony and want of hospitality.

"Herr von Raumer said—'I went to his house one evening, and we nearly succeeded in boiling some hot water for tea, but not quite.' Niebuhr told him that it was a serious thing to associate with Amati the Roman archæologist, because he frequented a certain wine-house called the Sabina, where the wine was dear. Amati was keeper of the Chigi library, and held a post in the Vatican. His learning and judgment were universally acknowledged. He was particularly well known for his transcription and collation of codices, and a man whom any one might be proud to know.

"When the late King was at Rome Niebuhr did the honors so badly that the King was quite impatient. He showed him little fragments of things in which he could take no interest, and

none of the great objects. One day Niebuhr spoke of Palestrina. 'What is that?' said the King. 'What, your Majesty does not know that?' exclaimed Niebuhr in a tone of astonishment. The King was extremely annoyed, and turning round to some one said, 'Stuff and nonsense; it's bad enough never to have learnt anything, without having it proclaimed aloud.'

"Niebuhr's ideas about his own importance, and his excessive cowardice were such, said B——, that at the time of the Carbonari affairs, he actually wrote home to the Prussian Government that the whole of this conspiracy was directed against himself.

'In the steamer from Mainz to Bonn was—*inter alios*—an individual of the genus *Rath*. He sat opposite to us at dinner on the deck, and first attracted my attention by the following reply to his neighbor, a man who appeared to entertain the profoundest admiration for

him. 'Oh, yes, there are lots of *theorists* in the world, only too many. I represent *den gesunden Menschenverstand* (sound common sense).' Delighted at this declaration, I raised my eyes and saw a face beaming with the most undoubting self-complacency. He went on to detail certain schemes of his for the good of his country—Oldenburg, as it seemed. My husband began to interrogate him about Oldenburg, and I said all I knew of it was from Justus Möser. The worthy Rath looked at me amazed, and said [this was the first time he ever heard Justus Möser mentioned by a lady. I said so much the worse, there is an infinity of good sense in his writings. Yes, but he never expected to hear of his being read by a lady, and that I was evidently the second representative of sound common sense in the world, 'worthy to be *my* disciple,' added he with emphasis."—*Macmillan's Magazine*.

EXPERIENCES OF AN INDIAN FAMINE.

RECENT telegrams from India told us that, in addition to large numbers of poor employed on various relief works, there was more than a million of people still receiving charitable relief, and further that the prospects were still bad in Madras.

It is hard to realise the intensity of misery that is condensed into this brief report, or to understand what a terrible state the country must be in before so many thousands have been reduced to that abject stage of suffering, which has compelled them to seek for help at the charitable hands of Government.

Famine is unfortunately of late years no novelty in India, so that many of us, whose lives are spent there, know from hard experience how awful the calamity now impending over India is; and possibly a short account of the personal experience of one official, telling what was done and suffered a few years ago in one district, may be useful in showing how great the difficulties are that have now to be encountered, and what vast efforts to save life are necessary.

It must be remembered that this account only refers to one district: where the famine, as it now does, spreads over

large areas, the difficulties of dealing with it satisfactorily are immeasurably increased. Misery is in no degree lessened by being wider spread, and all the various episodes of suffering are multiplied to an unlimited extent.

In 1868-69 many districts of the Central and North-west Provinces suffered severely from long-continued drought and its after-effects. Fortunately the area thus affected was limited, so that Government was able in great measure to cope with the enemy and ward off many of famine's worst attributes; still, even when Government does its utmost, the areas to be supplied are so vast, and the numbers so unwieldy, that the sufferings of the masses cannot but be terrible. In the year 1866 to 1868 the Jubbulpore district was peculiarly unfortunate. In one year the rainfall was slight, so that but a poor crop was gathered; in the next the rainfall was so heavy that almost all the grain sown in the rainy season was destroyed; in the third year the rains failed altogether. Where as a rule sixty inches of rain fell, in 1868 there were not more than twenty-five. In consequence all the rice and millet crops—the staple

food of the bulk of the population—failed entirely: the ground was so hard and dry that the wheat sown in November never came up at all. Prices rose higher than had ever been known since the famine of 1839, and starvation stared the miserable population in the face.

At that time Jubbulpore was much more cut off from the world than at present: now the main line of the Great Indian Peninsular Railway has its terminus in Jubbulpore, where it is met by a branch of the East Indian Railway from Allahabad. In 1868 the first of these lines was in course of construction, and thus not available for the transport of grain. The famine affected the neighboring districts on both sides, though not as much as Jubbulpore itself; still little assistance could be obtained from them, while in the native states to the North—Rewah, Punnah, Myhere and others—the distress was equally great, and the arrangements for relief not so good. In consequence the difficulties of the officials were very greatly enhanced by the streams of emigrants which poured into our relief camps on the first whisper of Government aid to the distressed being bruited abroad. The East India Railway from Allahabad to Jubbulpore was open, but grain was so scarce in the North-west, and prices ran so high there, that it hardly paid private speculators to import by rail. At first the markets were scantily supplied through the local merchants, but as this was the third year of trial, the existing stock in the hands of the better classes of land-owners was soon exhausted, and grain had to be imported by rail from Patna and other places where fortunately it was procurable at reasonable prices. From the terminus at Murwarra, in the absence of carts, it was conveyed to the various relief centres on pack bullocks, which fortunately were that year available. Inland carriage is always a serious difficulty in these emergencies, for in the rains the roads are quite impracticable for wheeled conveyances of any sort.

The famine was at its worst from March to July 1869; but pressure had begun to be felt as long before as November 1868, when it was seen clearly that all the wet crops had failed through want of rain. The population of this

part of India is mainly agricultural, and it relies for its support and food on the crops dependent on the rainfall—that is, rice, Indian corn, and several kinds of millet. On the other hand, the produce of the cold weather crop—such as wheat, grain, and other varieties of pulses—are looked to to enable the cultivator to pay his rent, buy plough cattle, and obtain such luxuries as his means allow. Each village is as a rule a community in itself: it has its head-man, its artificers, village watchman, and herdsman; in the larger villages there is the school, the police post, and the village accountant or Putwarri.

As soon as it was fairly understood how grave the situation was, every effort was made to meet the difficulty. The Chief Commissioner of the Provinces gave the district officials authority to act to the best of their ability to save life; he also authorised suspension of the Government demand for revenue wherever such was found to be desirable. He himself visited the most distressed part of the district, and after inspecting the various measures for relief gave permission to draw on the Government Treasury for such sums as were found to be absolutely necessary to save life and suffering. A commencement was first made by converting police posts into centres of relief. This was done very early in the year. When the police officer on his tour found that the poorer classes were even then beginning to fail, he supplied his subordinates with funds and directions to succor the distressed wherever it laid in their power. The village watchmen and the proprietors generally were ordered to report at once to the police, or to district headquarters, the existence of all such distress as the village community could not allay of itself. Schoolmasters and village accountants were employed in the same service; and finally twenty-seven relief camps were opened for such poor people as had nothing. The Government was most liberal: relief works were opened throughout the localities where the distress was most prevalent; and for people who could not work (either on account of age, illness, or suffering through their privations, huts were set apart and attendants to minister to their wants.

The relief works generally consisted of lengths of road, intended eventually to act as feeders to the railway. Where there was no room for these the opportunity was taken of all the tanks being dry, to clean them out thoroughly, and repair their embankments. The laborers were paid according to their work—certain tasks being allotted for men, women, and children—and payment was made in grain, or where there was a market in which supplies could be purchased, in money. Supplies of cooked food were kept always ready for such unfortunates as were brought in too far exhausted to help themselves; and these were not a few. It constantly happened that men and women of good family, ashamed to beg, quietly gave themselves up to die, in preference to coming to ask for relief. To find out these cases was, and always will be, a great difficulty in an Indian famine. Nominally, the proprietor or head-man of the village is held responsible, and he is expected to keep the police, or the nearest Government official, informed of any such cases; practically, he is often nearly as badly off himself as the worst cases in his village, and is quite unable to render assistance. Much may be done, and is done, by house to house visitation; but to carry out thoroughly such visitation over the enormous areas that have now to be dealt with, is a work of vast magnitude and cost. European officers are not available in sufficient numbers, to say nothing of the enormous addition to the cost of relief if Europeans are employed so largely, while low paid natives in subordinate positions cannot be trusted to carry out thoroughly a matter of life and death of this sort. Not only are natives apt to work in a perfunctory manner, but even if they were very carefully supervised, they are, I may almost say, physically incapable of looking at the matter in the light that we do. Few of them will have sufficient knowledge of the anatomy of their fellow-men to enable them to judge satisfactorily whether the latter are in a dangerous state of emaciation; neither will they have kindly feeling towards their fellows in an equal degree to Europeans. Natives look upon an infliction of this terrible nature as a direct visitation from Heaven; and if men die of starvation, they

consider that their death has been brought about by the hand of God, consequently no one is to blame; although it is quite possible that a little extra care or exertion on the part of lookers-on might have saved some at any rate of the lives. They have never until recently seen a Government accept the responsibility of its position towards its subjects in the matter of famine, after the manner of the English, who enforce the practice of saving life, where such life can be saved by human agency, without counting the cost.

Natives are charitable to a degree: they give with great liberality, but they lack the energy to see that their charity takes the right direction. Instances are not rare of distress in native states. The chief considers he has done his duty liberally if he authorises a remission of land revenue; he takes no steps to see the remission reaches the unfortunates for whom it was intended; in consequence often the only gainer is the farmer of the village, who is probably in collusion with the revenue official; the tenants are forced to pay up the uttermost farthing, and if after that they die of starvation, their death is set down to the visitation of God, and the liberality of the chief in remitting his revenue is extolled. It is these peculiarities of character that cause some of our many difficulties in India.

With a district short-handed in the way of Europeans, it was no easy task to organise and see carried out all the arrangements requisite for the saving of the many lives that would otherwise assuredly have been lost without these efforts. The country was, however, fortunate in having men who devoted themselves to the work, not only from a sense of duty, but out of sheer kindness of heart. Conspicuous among all was an engineer officer in the employment of the East India Railway. He, from his long residence among the people, was thoroughly acquainted with their wants, and earned their confidence to a wonderful degree. He was thus able to render the most valuable assistance to the district officials, who happened at that time not to have been very long in the district, and consequently were not nearly so conversant of the requirements of the country and people as he was.

His was no easy or pleasant work. His house was situated in the midst of the most distressed country. Of his own free-will he took charge of all the relief camps within a radius of some twenty-five miles. In this area there were some fourteen different camps; and after his own morning's work was over, he used to devote his days to these poor suffering people. At his own head-quarters the relief camp was perhaps the largest in the district. The numbers there varied from 800 to 4000 souls in all stages of emaciation and sickness, for sickness in all its most terrible forms always follows famine. His servants died of cholera or smallpox, and his own employers begged him to leave his famine and plague-stricken residence; but he refused, and remained calmly at his post until good times came again. His assistance to the district officials was simply invaluable, and it was given out of pure philanthropy.

A short description of the relief camp over which he presided may be interesting. All the camps were more or less alike, and on the same principles, so that the description of one will do for all.

On an open plain somewhat cut up with ravines, which all led down to the bed of a river, were several rows of huts, roughly constructed of boughs of trees and grass: for [the sake of order and cleanliness these huts were built in streets in contiguous order, with clear spaces in front and in rear. At one end stood the store for grain, protected from plunder by a strong barricade of wood, and guarded by policemen and chuprasies, who on that occasion were equivalent to special constables. The entrance to this store was through a barrier, carefully guarded, and the recipient of the dole was taken through the grain store to where the fire-wood was deposited. There he received his allotted quantity, and was then passed out at the other end, to make his own arrangements for cooking and eating. At first there was some difficulty in preventing the starving crowds falling on those who went in first and robbing them of the grain, which was immediately devoured raw. The offenders in this way were new-comers who were on the verge of starvation, and did not believe that, if they waited

their turn, they too would obtain a supply of food. Gradually, however, the lesson was learnt, and the camp at Murwarra, though the largest, and crowded with the worst sufferers, used to be the most orderly in the district. At the other end of the camp stood the hospitals—one for cholera patients, one for smallpox; for general ailments, medicine was given out either at the local dispensary, or by a peripatetic dispenser in the open air. About a quarter of a mile or more from the camp was the burial ground, which, alas! was very full before the famine ended. To this camp a native doctor was attached; and he used to do his best to attend to the sick in other places as well, but, scattered as the relief camps were over the country some miles apart, but little could be done in the way of real medical attendance to all who required it. The number of medical men available was far too limited to admit of a doctor being attached to each camp. Even if such an arrangement had been feasible, it is doubtful whether the people would have appreciated the boon. They are quite unused to meet medical practitioners, or men who deserve the name, in the daily round of their lives; so that, in these sad emergencies, they neither expected nor cared particularly for any such a luxury. Most villagers have a certain knowledge of the medical properties of herbs and barks, and in every village there is some wise-man who is supposed to understand the art of charming away diseases: with these the people are quite satisfied. They can always fall back upon police posts, which are supplied with simple medicines and directions for use. Perhaps the greatest difficulties we had to cope with were the carelessness of the people as regards infection, and their utter disregard of all proper sanitary arrangements. Nothing but constant supervision sufficed to keep the camps in anything like a wholesome condition, and to segregate smallpox patients from their relatives. Even now the people do not recognise the necessity of keeping sufferers from smallpox apart. Only last year, in visiting this very part of the district, my duty was to visit the various schools; and there I constantly found children covered with confluent smallpox, sitting

among their fellows, brought in just to swell the complement of pupils at the examination.

When the first rush of starving poor to these relief centres was over, they were at once drafted to the various relief works in the neighborhood, and told off to task work, each according to his physical ability. (It was necessary to supply all comers with food charitably at first, as many came from long distances, and were quite exhausted by the privations they had suffered on the journey; but as soon as ever they were fit to move they were given employment. I was much struck by their willingness to work; all the decent agriculturists preferred working for their bread to receiving it in charity, and many used to work on until they dropped, in preference to begging. Of course there were many idlers and bad characters, who took advantage of the opportunity, and did as little as they well could; but a percentage of bad characters is a necessity on occasions of this sort. The better classes avoided asking for help until all they possessed was gone, and then resorted to every sort of substance to stave off the pangs of hunger before asking for relief. The fruit of the Mhowa (*Bassia latifolia*) always, when procurable, forms a considerable portion of the food of the poorer population; the flowers and fruit are collected, dried, and mixed with the millet flour commonly in use, and baked into the unleavened cakes of daily use: in 1869 this crop had almost failed. Another fruit, the Bér or *Zizyphus Jujuba*, is also a favorite addition to the simple food of the people in times of scarcity. This was scarce; and it was an ordinary sight to see the people scattered throughout the jungles in search of this or any other fruit with which they might stave off the pangs of hunger. The bark of the Indian cotton tree (*Bombax malabaricum*) contains a considerable quantity of starch: these trees were stripped as high as the people could reach; the bark was boiled down, mixed with a large portion of pipe-clay, and eaten in quantities; the people being quite careless of the fact of this bark having strong medicinal properties as well. The pipe-clay was said to obviate this effect; but it was terrible to see a

family that had been subsisting on diet of this description: it just sufficed to retain life, but as there was little or no nourishment in the substance eaten, the people were walking skeletons. Their limbs were nothing but skin and bone, while the stomach was enormously distended; the faces drawn and haggard, marked with this blue pipe-clay, gave them a most ghastly appearance. It was when they were found or brought into the relief camps in this state, that the greatest care was necessary to prevent their over-eating themselves, and dying of repletion.

Many were the instances of real heroism that were seen during that time of terrible distress: parents depriving themselves of their last mouthful to save their children; sons, hardly able to articulate, begging the relieving officer to send help to their people dying at home, before attending to them; people with barely enough to support their own families shared that little with the helpless children of their neighbors; children left orphans, or perhaps deserted, were taken charge of and cared for by neighbors, or even strangers, who little knew but that theirs would be the next turn. Of course the picture had its reverse side, and terrible it was. Little children unable to walk alone were deserted; aged parents, ill and decrepit, were left to die; wives were left by their husbands to starve; and the strong robbed the weak of even their last morsel of bread. It is a time like this that brings out human nature in both its worst and best forms; yet one striking feature was the fact that there was a far greater inclination among the bulk of the people to lie down and die in despair, than to turn to violence and lawlessness. A grain-dealer's shop was plundered here and there, but there was nothing like grain riots, or grain robbery on any systematic scale. In the relief camps it was necessary to protect the store houses and to put up strong barriers to prevent starving newcomers plundering their weaker brethren of their bread; but once settled down to work, and the receipt of regular food or pay, these poor people were marvelously orderly and obedient.

It is sad to think of the various stages of misery these sufferers had to wade through: the story of one man's life at

that time will hold good for hundreds. One man, before this famine and its two previous years of distress, had been fairly well to do, prior to the last settlement. He had farmed a village, had paid the rent due to his landlord regularly, had a few head of milch cattle, in addition to his plough bullocks, and had saved enough to buy his wife some long-wished-for silver bangles. Government had conferred on him the proprietary rights in this village. With years of reasonable prosperity, this boon would have been much valued; for although the Government revenue and cesses came to something more than the farmer had been in the habit of paying to his landlord in kind, still the demand was not more than the land properly worked could well afford to pay. The Government custom is to assess its demand for revenue at half the actual assets of the village, bearing in mind the increase in value of the property that could be effected by simple improvements during the term of a long lease. The demand so fixed is unchangeable, and is payable either in years of prosperity or the reverse. I have no intention of entering here into the *vexata questio* of the advantages or otherwise of our systems of settlement of the land revenue in India; but I merely wish to show that the fixity of the Government demand, and its novelty, was, perhaps, at this crisis, harder to bear than the old system of payment in kind. Had the famine come later, when the proprietor had reaped the advantages for some years of the Government system of payment of half assets, the fixity of the demand would not, in all probability, have made itself felt so severely. As it was, with the new *régime* came the years of scarcity. Our proprietor found his crops fail, and still the Collector called for his revenue. Formerly his landlord would have had to bear half his loss. The farmer had little or no spare capital, so, to enable him to pay the first year's demand, he sold all his milch cattle. 1867 followed with its extraordinary rainfall, which all but drowned everything sown: again came the call to pay up the Government demand, and the owner of the village had to have recourse to the money-lender. The latter made a merit of letting him have the requisite funds, on a mort-

gage of the proprietary rights of the village. This mortgage deed would have done credit to some of our own usurers. It first stipulated that interest was to be paid at twelve per cent.; that the unpaid interest was to be added to the principal, and interest at the above rate to run on both; that before payment of the principal a drawback of three per cent. was to be deducted by the lender; that the loan was to be repaid in certain instalments, failure of payment of any one of which authorised the creditor to demand payment in full, in one lump sum, principal and interest; and finally, in default of payment, the deed was to be considered a conditional sale, and the village was after a certain term to become the property of the creditor without further proceedings. However, the money was obtained, the Government demand was paid, and the farmer lived in hopes. 1868, with its drought followed on the heels of the excessive rain of the year previous. In the cold weather of 1867-68, the farmer succeeded in raising a field or two of wheat, the sale of which enabled him to pay his first instalment of revenue, and to keep the wolf from his door a short time longer. In July and August, when the heavens should have been black with rain, the sky was like brass, and the earth bound with iron; there was nothing but heat, and heat the more intense from its being unnatural. The grazing for the cattle had long disappeared, and the plough bullocks were kept alive by being fed on the branches of some of the jungle shrubs, or by being driven away into the highlands of the Satpura, where the numerous rivers and watercourses prevented the total destruction of all fodder. August passed; and no rain. With September came a few showers, just enough to raise delusive hopes. The little grain there was in the house, that had been kept for seed, was put into the ground; and the farmer and his family watched the heavens with hopes which quickly turned to despair as they saw the skies clear, and the monsoon end with less than one-third of the usual rainfall, just sufficient to make the crops sown germinate. As they withered away, so disappeared the hopes of the family. Nothing but ruin and starvation stared them in the face. Government,

recognising the difficulty, suspended its demand to a more convenient season; but to procure the mere necessities of life, recourse had again to be had to the money-lender. The plough cattle were given up to him at a nominal price to meet his demand for the instalments due; and after much supplication he was induced to renew, raising his rate of interest from twelve to twenty-four per cent., and shortening the term for repayment by a year. In consideration of this he advanced a small sum for the immediate necessities of the family, and so enabled them to tide over the year. With the failure of the Mhowa* crop in February, the last hope of these poor sufferers was gone. Still they held on, starving as they were, until April. The mother, ill and exhausted, could not nourish her baby, and it died; the second child, unable to bear the privations, fell another victim in March. At the end of that month the mother died of cholera, induced by the miserable substitutes for nourishment that she had had to put up with; and at last in April the husband and his two other children with difficulty dragged themselves to the nearest relief centre. There their necessities were relieved, and they gradually recovered their strength, and lived. But for what?—to be houseless, homeless, and the bondsmen of the usurer. This was by no means a singular case. And in every famine the results must be much the same—a long struggle against fate, in which the weak in large numbers succumb.

One striking episode in an Indian famine is [the readiness with which the afflicted snatch every opportunity to help themselves. This was singularly exemplified in this famine of 1869. Throughout most of the fields in these parts there springs up, in the beginning of the rainy season, a weed known by the local name of Sama (*Panicum miliaceum*). It bears an ear like rice, full of grain. The crop of this in 1869 was peculiarly abundant. It was the first grain to come into ear, and as it ripened our relief camp and works were deserted. The people spread themselves over the surrounding country to collect the Sama, and never returned:

in one week's time the numbers fell from (speaking from memory) 8000 to 400.

The rains that year were fortunately very favorable, the crops were everywhere abundant, the poorer classes found plenty of employment in weeding and other agricultural pursuits, and the necessity for relief measures came to an abrupt conclusion. This was the case where the famine only lasted one season. How terrible the sufferings of the people would have been had it continued another year, it is awful to think, even though, most fortunately, the famine was local and confined to certain comparatively small areas, through which in dry weather communication was not difficult. As it was, it taxed the resources of the district very heavily; and its effects are still visible through all that part of the country where its ravages were most felt. There the villages are backward, the people poor—much ground is still waste, and the value of proprietary rights in land fifty per cent. less than similar land in other parts where the famine did not reach, while the burden of debt still weighs heavily. One bright spot in all this misery was the liberality with which members of all creeds and colors came forward to assist. The Government gave freely, Europeans were very charitable; but they are few in number, and their means quite inadequate to meet the heavy demand—some of the wealthy natives behaved splendidly. Jubbulpore is a large city of between 50,000 and 60,000 inhabitants. Among these there are of course many miserably poor, whom the famine had brought to the verge of starvation: added to this there was a continual stream of more than half-starving emigrants constantly pouring through the town on their way southward in search of bread and employment. To look after these poor people was alone no small task—but it was undertaken by four of the well-to-do native residents, one of them a widow lady. These four charitable people used to see that everyone of the hungry and destitute received a daily meal. For a long time they managed the distribution entirely themselves, but eventually their difficulties became so great through the crowds of beggars that this gratuitous supply of food used to

* Mhowa (*Bassia latifolia*).

collect, that they asked the district officials to take the matter in hand, they supplying as much food as was required. The distribution was no easy task, for there were many professional and religious mendicants, whose sole endeavor was to obtain more than their proper share either by fair means or foul, often by robbing their weaker brethren. Besides this charity on so large a scale, very large sums were contributed to the general relief fund—people of all creeds and classes, Europeans and natives, all gave, and gave liberally; and nothing but this charity, aided by Government, saved us from a great disaster. The deserted children, where no relations could be traced, or where the relations could not afford to keep them, were made over to the Orphanage of the Church Missionary Society; Government making itself responsible for a monthly payment to cover the cost of their food. At one time the number of these waifs and strays was large, but in spite of all that was done to save them, the mortality among them was great; while of those that survived some few ran away when the famine ceased, and went back to the villages where they originally lived—some perhaps to find their parents returned from exile, others to live on the charity of their neighbors. It would seem as if misfortune had hardly yet done with these poor waifs, for even this last year cholera broke out in the Orphanage among them, and carried off nearly half their number, although they were as well if not better cared for than they would have been with their parents in villages.

It was curious to watch how misfortune after misfortune followed the unfortunate inmates of our relief camps, and not only them, but those villagers who had been able to hold out in their own villages. In 1869 the coming of the monsoon was watched with the most intense anxiety: in Jubbulpore it burst in full force on June 29; in the north of the district, where the worst of the distress was, it held off for some days longer. Though only fifty-six miles to the north, not a drop of rain fell in Murwarra until July 12: the heat was intense, the whole country was covered with a dull yellow haze that hung over it like a pall. To go by rail from Jub-

bulpore, where everything was refreshed by the welcome showers of rain, to Murwarra, where this intense and oppressive heat still clung to the country, and made the people more depressed than ever, was one of the most painful experiences of my life. At last, on July 12, the rain commenced, and before eight A.M. the next morning thirteen inches fell: the whole country was a swamp; our relief camps were flooded. The inmates of the huts, which had not been built for a terrible fall of this description, were drenched; and yet with it all they were cheerful. They had lost the feeling that God had deserted them; and though they suffered from cold and wet, they knew that they were saved from what they most dreaded—another year's drought. But there was still another calamity to come upon them. The rainfall was so unusually heavy that in one night the roads were turned into sloughs of despond. The cattle, weak from long fasting and an absence of proper food, fell down in numbers, and were suffocated in the mud. The morning after this heavy fall I saw more than forty head of cattle dead in one village. Again the cultivators were in despair, seeing their plough bullocks dying one after another, and knowing they had no means to buy others. They had been kept alive with the greatest difficulty and only by constant care, and now they were being destroyed in hundreds. They had looked to these few remaining cattle to till their fields, and enable them to raise the crops promised by the rain; and now these hopes were blasted. Fortunately, Government again came forward with liberal aid; timely advances to the cultivators enabled them to obtain a fresh supply of plough cattle, and get in their crops in due season; this season was very favorable, and the harvest a heavy one, so that the famine may be said to have ceased with the sowing of the crops.

It was merely through the area of the famine being confined to such comparatively narrow limits, and to the fact of its only lasting a year, that so much could be done both to save life, and to assist the sufferers to recover after the ordeal they had to pass through. What, therefore, must now be the sufferings of the people of the Madras Presidency, where famine has been raging for nearly a

year over the larger part of the country, and where it is feared that there is nothing but a second year of famine to look forward to, with all its horrors magnified, owing to a scanty crop being threatened in various other parts of India as well? Up to this most of the other provinces have been able to send of their abundance to Madras and Bombay; if their supply for home consumption runs short, the country will be in terrible straits, and the resources of Government, large as they are, will be taxed to their utmost limit.

For all this past year Government has

been helping the people in the famine districts through their difficulties at an enormous expense, and, doubtless, will continue to do so at any cost; but the strain on all concerned must be terrible. We can only hope that the seasons may yet change, and that thus a part at any rate of this grievous suffering may be averted; it is, however, so late in the year that there seems to be but little room for such hope. In that case India will require not only all the sympathy, but all the help England can give.—*Cornhill Magazine.*

THE STORY OF A PATRON SAINT.

MANY contradictory stories are told about the body of St. Mark, even in Venice, where the relic is believed to be enshrined. Its precise whereabouts are unknown,—‘because,’ say the Venetians, ‘the last Doge did not divulge the secret.’ The last Doge was Manin (Lodovigo), who abdicated on May 12, 1797, after St. Mark had been the patron saint of Venice for nearly a thousand years.

According to the most trustworthy accounts,—as revealed in documents recently brought to light,—the body of St. Mark was taken to Venice for special reasons (and not by mere chance); one of those reasons, being that the inhabitants were tired of St. Theodore—their patron saint till the days of the tenth Doge, Angelo Partecipazio. At this period of their history, the Venetians discovered that they were badly represented in Heaven! How could they expect prosperity on earth? St. Theodore was a good saint, but he was lazy; the miracles he performed were of little use; and, people clamoring for a change, wise men pondered over the problem. Were there not grades of beatitude? was it not possible to have a more powerful protector than St. Theodore? This, then, was the difficulty. A weak saint, but a strong partnership of Doges; a father with his two sons (as assistant Doges) ruling over Venice, but the city badly attended to on the other side of the grave! What remedy could be applied to so glaring an evil? Whose ministry could be appealed to in

the parliament of saints and martyrs? Angelo, and his sons Giovanni and Giustiniano, wearied their saint from day to day with useless prayers, and Giustiniano (afterwards eleventh Doge) finally made up his mind that Venice should have a new guardian. Three Doges, reigning together, were not enough for the young republic; it must have a fourth potentate, that potentate being St. Mark. But the body of the great Evangelist was lying on a distant shore; namely, in Alexandria, in Egypt. How obtain it? How place Venice under the protection of a saint so highly esteemed—and so capable of performing miracles—as the writer of the second gospel?

In the year of grace 827, the eleventh Doge occupying the ducal seat, a number of strange rumors reached Venice; namely, that the body of St. Mark was resting uneasily in its coffin; that the shrine built over his tomb was being desecrated by infidels; that money could buy the relic, if properly offered (*i.e.* with money in one hand and a knife in the other!); and, finally, that the saint himself was anxious to be transferred to Venice. The persons who set this rumor afloat were sailors trading to and fro between the Lagunes and Egypt; men who at an emergency could become pirates or merchants; men to whom theft and murder were acts of grace, if committed in the name of religion. These men, after consultation with the Doge, returned to Egypt, properly supplied with money and properly armed, and entered Alexandria in a very religious frame of

mind,—intent on stealing their saint, if they could not obtain him by other means.

When they reached the shrine, they found it under repair; masons and builders were at work in the church; the priests who guarded the body were on the tip-toe of expectation for some remarkable occurrence. Visions had appeared of saints and martyrs with wreaths of fire on their foreheads; a lion with wings (the Lion of St. Mark) had been seen prowling about the city; a saint in a white robe (believed to be Santa Claudia) had waylaid one of the priests on his way home. Surely a miracle was at hand! The priests took counsel one with the other. Why not remove the saint's body until the church, now under repair, was thoroughly restored? At this juncture arrived the merchants of Venice—merchants, or sailors, or pirates—call them what we will; in those days the words were pretty well synonymous.

The priests and the merchants met and deliberated. The former had merchandise to sell; the latter had money in their pockets: how should the transfer be made? How much was a dead saint worth, if a living man—sold as a slave—was worth such and such a sum? A word, a look, a grasp of the hand; the whole thing was settled in a moment. The merchants were to have the saint's body, and the priests were to sew another saint in St. Mark's cerements. What corpse more appropriate than the body of Santa Claudia—she who had appeared in visions in the streets of Alexandria?

St. Mark was taken out of his cerements, and deposited in a basket which the merchants had brought into the church. Over the body were thrown sweet-smelling flowers, and over the flowers a number of joints of pork, the flowers and the pork being introduced for special reasons: the flowers to deaden the odor of sanctity (which was sure to emanate from the body), and the pork to frighten away such Mahomedans as might be tempted to pry into the basket.

The corpse of Santa Claudia being exchanged for that of St. Mark, the priests imagined that their work was done; but they were mistaken.

Men and women—the former with sticks and crutches, some of the latter

with children in their arms—rushed into the church, exclaiming wildly: 'Where is St. Mark the Apostle? Where is St. Mark the beloved of God?' Women and girls fell down on their knees; old men laid their foreheads in the dust; the younger and bolder fellows insisted on seeing the body. The basket of pork had had its effect; the inhabitants, drawn from their homes and workshops by the odor of sanctity, had flocked to the church to examine the saint's coffin! But the good priests were equal to the emergency. They exhibited the shroud containing the body of Santa Claudia; they bowed and prayed, they made the sign of the cross before the saint's cerements, and said prayers before the high altar; and the people, pacified, though not altogether convinced, returned in peace to their dwellings. The odor of sanctity was not the odor they had always been accustomed to as the odor of St. Mark, but it was a sweet and comforting odor enough; and moreover it was a miraculous odor, for the new saint had therewith performed her first miracle; making the people believe that she—Santa Claudia—was St. Mark the Apostle! The early historians of Venice chuckle over this event; and one and all concur in stating that the fraud was a pious one, and therefore no fraud at all.

But the risks of the enterprise were not confined to the church. While the sailors were conveying their prize to the sea-shore, they were beset by men and women anxious to have a peep at the basket. But for a magic word—a word taught by the priests—the basket and its bearers might have been sorely handled; the word was 'khanzir,' and it meant pig. 'What have you got in your basket?' 'Pig!' 'Why are you in such a hurry to reach your ship?' 'Pig! pig!' 'The devil take you and your burden; you are tainting the air for us.' 'Pig! pig! pig!' The sailors were persistent in their replies, and the crowd fell back in trepidation. What was the meaning of this odor of sanctity in the wake of a basketful of pork?

The body of St. Mark was stowed away carefully on board the Venetian ship. The flowers and the pork, with their sediment of saint in the bottom of the basket, disappeared in the hold, and

the sailors, with that word 'khanzir' still ringing in their ears, got ready for departure. But they had reckoned without their host. Here, for instance, is a man in authority who insists on climbing into the ship. What does he want? He is a custom-house officer; he is on the look-out for contraband goods. Is he, too, afraid of pork? And, if not, are relics contraband? Down went a sailor into the hold of the ship; up came the basket in the sailor's arms, wrapt in an old sail; up went the sail strung to the mainmast, as part of the ship's furniture. Honest seaman! Wise and sensible precaution! The officer withdrew in disgust, and the ship set sail without further adventure for the Port of Venice.

But the voyage was long and troublesome, and the mariners had a hard time of it. Worried by storms, waylaid by fogs—stranded, becalmed, and bedevilled—the captain once or twice gave himself up for lost. One night in a hurricane, the vessel plunging like a mad thing in the midst of the rocks—the moon shining weirdly on the scene through a great gash in the clouds—a tall man in white appeared at the helm with a wreath of fire on his head. The helmsman stepped aside, and running up to the captain (who was asleep) woke him, and told him what had happened. The captain and his crew knelt down on the deck; the wind sank, the sea became suddenly calm! Who was this tall man with a wreath of fire on his head and a white robe, like that of an angel, reaching from head to foot? St. Mark the Evangelist! Who but he would have interceded in this way for the preservation of the basket of pork? The ship got clear of the rocks, and the saint, leaving behind him an odor of sanctity—as fiends leave behind them an odor of sulphur—vanished into thin air.

The ship reached Venice on January 31, 828, two days before the great *fête* of the Purification. The captain's name was Rustico, the steersman's Buono or Buoni; this last a native of Malamocco. The landing was effected at a place now occupied by the church and convent of San Francesco della Vigna, not far from the Island of St. Michael (the cemetery) and close to the Arsenal. But the Ar-

senal did not exist in those days, and the dead were not taken to St. Michael's Island. The whole place was a desert: a wilderness of islands, half swamp and half sand, but considered in ordinary times a safe harbor, and an easy if not a convenient landing-place. Rustico and Buono hastened to the Doge's house near the Rialto, to invite his Excellency to visit the ship.

But a greater than the Doge had given the Saint welcome to Venice. Tradition is so explicit on the matter, and the early Venetians are so positive about it, that I shall not attempt to gainsay it. The figure in white, which stood on the shore to greet the Evangelist, was not a lady or a priest; it was not Santa Claudia; it was not the figure of the fat old Doge; it was an angel from heaven, and the angel's words may be read to this day on monuments and churches all over the city. The utterance of the angel is beyond dispute. It was oracular and made in Latin, and the Latin is as good as any now spoken at the Vatican: *Pax tibi, Marce, Evangelista meus*. Who can doubt the authenticity of words so explicit—words which, for a thousand years, became the motto of the Republic? Doubt the name of Rustico, if you will; doubt the name of Buono, if you dare; doubt the existence of the Doge, if you can (supposing you to be a whitewasher of history): but do not for a moment doubt the scholarship, or the existence, of the angel who received the body of St. Mark.

The new saint was carried to his temporary shrine near the Rialto, not far from the ducal mansion; and there received with honor. The Doge's palace was not built in those days, and the tract of land now known as the Piazza San Marco was an ugly waste, and in wet weather a marsh, cut up into two unequal parts by a canal, with a bridge over it. But on this ugly waste, games and festivals, the precursors of the tournaments of the Middle Ages, had been held at various times; and here, in honor of St. Mark, a grand procession was formed during the first week in February. St. Theodore was solemnly deposited. The church in the square was rebuilt and reconsecrated, and the new saint, from the beginning of the ninth to the end of the eighteenth century, be-

came the patron of Venice. His lion became the symbol of Venetian power; it was painted on shields and woven on standards; it was impressed on coins; it was set up in effigy in various parts of the city. Tourists admire it at the present day over the entrance to the cathedral, and on the clock-tower; a lion with eagle's wings, with the face of a man, having under its paw a book wide open, with the words of the angel, as quoted above, written in golden letters. But the body of St. Mark is believed to have been stolen in the sixteenth century by Carossio, a usurping Doge, and by him sold or otherwise disposed of to religious communities in various part of Europe—a tooth to one, a bone to another, a lock of hair to

another, and so forth; so that, strictly speaking (if these reports be true), Venice no longer possesses a patron saint. No one knows the resting-place of St. Mark's body. Was it really stolen by Carossio, or did it disappear of its own accord when the last Doge abdicated in favor of Buonaparte, the saint being unwilling to survive the fall of the Republic? The answers to these questions are not easy to find. Those who profess to know most about the matter assert gravely that the 'resting-place of St. Mark's body has been a profound secret for hundreds of years.' Being a secret, and those who knew it being dead, what wonder if the present writer is unable to divulge it?—*Belgravia Magazine*.

PROFESSOR TYNDALL ON PHYSICAL AND MORAL NECESSITY.

PROFESSOR TYNDALL is a great populariser, and we cannot doubt that his attempt at the Midland Institute on Monday to reason from the principle that the quantity of physical energy in the world is a fixed amount, and that none is ever either lost or gained, to the principle of moral necessity, namely, that every man is merely what his circumstances and his wishes make him, his wishes being as truly circumstances dependent on the hereditary and other conditions of his organisation as any other of the determining forces around him,—may have a great effect on the ripening intelligence of the country, if only from the influence naturally attaching to his name. But though he puts his case with his usual force and vivacity, he adds nothing whatever to the substance of what has been stated and restated hundreds of times by his predecessors in the same field. Indeed, the force with which he states the case conduces, as all force of statement naturally must, to a clear indication of the points at which his view entirely fails to meet the facts; and the natural candour of a genuinely scientific man renders the exposition of these glaring deficiencies of his view more striking still. We hope, therefore, that those who do not merely accept Professor Tyndall's authority as conclusive, but who go over the same ground without his obvious

bias towards the physical explanation of our moral nature, will soon find themselves pulled up by difficulties far more striking than any which are involved in the view of life which Professor Tyndall was endeavoring to refute. These difficulties accordingly we shall attempt to point out, and we shall succeed best probably in doing this by humbly following in Professor Tyndall's footsteps, only pushing to their legitimate consequences all the principles of his address.

Professor Tyndall teaches us, then, first, that as a given stock of heat is generated by a given amount of motion, and that the same amount of motion may be produced by the loss of that stated amount of heat, so also the force we employ in muscular exertion is the force due to a given amount of fuel supplied to the body. The oxidation of food within the body leads to the development of an exactly equivalent amount of heat, some of it within the body, some of it outside it. "We place food in our stomachs as so much combustible matter. It is first dissolved by purely chemical processes, and the nutritive fluid is poured into the blood. Then it comes into contact with atmospheric oxygen, admitted by the lungs. It unites with oxygen, as wood or coal might unite with it in a furnace. The matter-products of the union, if I may use the

term, are the same in both cases,—namely, carbonic acid and water. The force-products are also the same, heat within the body, or heat and work outside the body. Thus far, every action of the body belongs to the domain either of physics or of chemistry." Further, Professor Tyndall shows us how the action of the nerves consists in liberating a vast amount of stored force which is latent in the muscles, just as the power of steam is latent in the steam-engine till some one opens a valve which sets the steam to work, or as the electric force is stored in a galvanic battery till some one completes the circuit which sets the battery to work. It is not that the nervous energy directly produces the muscular energy, but that it liberates muscular energy which had been previously stored up. Then Professor Tyndall quotes from Lange the following illustration of this liberation of pent-up force:—

"A merchant sits complacently in his easy chair, not knowing whether smoking, sleeping, newspaper-reading, or the digestion of food occupies the largest portion of personality. A servant enters the room with a telegram bearing the words 'Antwerp, &c.—Jones and Co. have failed.'—'Tell James to harness the horses.' The servant flies. Up starts the merchant, wide awake, makes a dozen paces through the room, descends to the counting-house, dictates letters and forwards despatches. He jumps into his carriage, the horses snort, and their driver is immediately at the Bank, on the Bourse, and among his commercial friends. Before an hour has elapsed he is again at home, when he throws himself once more into his easy chair, with a deep drawn sigh, 'Thank God I am protected against the worst! And now for further reflection.' This complex mass of action, emotional, intellectual, and mechanical, is evolved by the impact upon the retina of the infinitesimal waves of light coming from a few pencil-marks on a bit of paper. We have, as Lange says, terror, hope, sensation, calculation, possible ruin, and victory compressed into a moment. What caused the merchant to spring out of his chair? The contraction of his muscles. What made his muscles contract? An impulse of the nerves, which lifted the proper latch, and liberated the muscular power. Whence this impulse? From the centre of the nervous system. But how did it originate there? This is the critical question."

And Professor Tyndall warns us not to assume that it was a soul or intelligence within the body which, stimulated by an act of knowledge and a consequent emotion of apprehension, set all this chain of nervous antecedents and mus-

cular consequents in motion, lest we try to explain the little known by the less known, or indeed, by the absolutely unknown. On the contrary, he assures us, the only scientific procedure is to refer this impulse originating in the centre of the nervous system to other changes in nerve-tissue which have preceded it, seeing that all our scientific knowledge teaches us to refer physical effects to physical causes. "Who or what is it," says Professor Tyndall, "that sends and receives these messages through the bodily organism? You picture the muscles as hearkening to the commands sent through the motor-nerves, and you picture the sensor-nerves as the vehicles of incoming intelligence; are you not bound to supplement this mechanism by the assumption of an entity which uses it? In other words, are you not forced by your own exposition into the hypothesis of a free human soul? That hypothesis is offered as an explanation or simplification of a series of phenomena more or less obscure. But adequate reflection shows that, instead of introducing light into our minds, it increases our darkness. You do not in this case explain the unknown in terms of the known, which, as stated above, is the method of science, but you explain the unknown in terms of the more unknown." "The warrant of science extends only to the statement that the terror, hope, sensation, and calculation of Lange's merchant are psychical phenomena, produced by or associated with the molecular motion set up by the waves of light in a previously prepared brain." On these principles, then, it is obvious that heat and motion, and nervous action and muscular tissue, and the mode in which touching a valve liberates steam, are all phenomena which are knowable in a sense in which the subject that knows them is not knowable. It is scientific to be quite certain that "a bowler who imparts a velocity of thirty feet to an 8-lb. ball consumes in the act one-tenth of a grain of carbon." But it is thoroughly unscientific to be certain that there is 'some one' who has this knowledge and who acts on it. It is scientific to be sure of the laws of motion. It is thoroughly unscientific to be sure of the existence of the person who is thus sure. The self which is the assumed centre of all

knowledge, is a mere centre of darkness, and while various true propositions can be stated, the assertion that I or any one can *know* them to be true is a false and unscientific one, which confounds the relation between phenomena with an unknowable personality that has no relation to them. But then, if there be no true nominative to the verb "to know," does not that throw doubts at least as great on the object of knowledge? If I seem to myself to have observed and mastered the laws of heat and motion, and am yet going quite astray in assuming that there is any self to master those laws, how am I to be certain that the heat or motion which is the thing I appear to know, has any existence either? Deny all reality, as Professor Tyndall teaches us to do, to the nominative of the sentence, "I know heat and motion," and can any one be sure that the accusatives have any reality either? They exist to me only as they exist in my consciousness. But if the very pronoun 'my' is an illusion, how can I be sure that the illusion does not affect all that that little word qualifies? Expunge the delusive notion that there is really an 'I,'—there is no need to use the word 'soul' at all,—to perceive, to receive sensation, and to transmit commands, and why should not that which is as closely coupled to this 'I' in the very act of perception, as one end of a stick is to the other end by the stick itself, be rejected with it? Professor Tyndall is untrue to his own principles. If it is thoroughly unscientific to assume an entity who perceives and feels and wills, it is clearly unscientific to assume that there is anything perceived, or felt, or willed. The fictitious character of the whole act of knowledge must surely follow from the fictitious character of the central assumption which gives that act a meaning. If there is no reason to suppose that there is a person to apprehend the external world, there can be no reason to suppose that there is an external world to apprehend, for it is only through the act of apprehension that any one even supposes himself to reach it.

Again, Professor Tyndall teaches us that because we cannot produce physical energy, but can only release or direct it, therefore the supposed human will can play no real part in human

affairs,—meaning, as we understand him, that it always takes other physical energy to determine how any special stock of physical energy shall be released or expended, so that it as much depends on the set of the currents in the previously existing physical energy, which valve shall be opened and which kept shut, as it depends on the previous accumulations of such energy how much energy shall emerge when the particular valve is opened. Professor Tyndall following Mill, and other such teachers, warns us that though we can determine our actions according to our wishes, we cannot determine our wishes, these being determined for us by the laws of physical organisation, of hereditary transmission, of social circumstance, and other conditions of our previous life. But assuming this teaching to be true, whither does it lead us? Why, of course, to the doctrine of pure materialism, that physical energy is the primal fount from which all mental phenomena ultimately proceed,—and proceed by an immutable process of evolution. If not only is the stock of physical energy in the universe a fixed stock, but if also the distribution of that stock is absolutely dependent on the character and amount of it, then it is clear there is nowhere for wishes and other such mental phenomena to come out of, except the one stock of physical energy which is the primary assumption with which Professor Tyndall starts, and it cannot, in his belief, be wholly uncreated and self-caused. Wishes, motives, volitions, aspirations, and the rest, must either be unexplained phenomena somehow due to this primary stock of physical energy, or must be uncaused, which is clearly not Professor Tyndall's view, since he defines science as the effort to explain the unknown by what is better known. If, then, he believes, as we understand him, that physical energy contains within itself the laws and causes of its own distribution, mind is a mere unexplained phenomenon of physics. If that be not true, if 'the whole stock of physical energy in existence' does not regulate its own laws of distribution, then there must be something else which does regulate it, and human will might well be defined as that which, though not able to create physical energy, is able to liberate and direct it

this direction or that, to concentrate it on one purpose or on another, within certain limits, as it will. Evidently, then, Professor Tyndall either teaches us pure materialism, or leaves us free to believe that though the stock of physical energy in the world is always the same, incapable of increase or decrease, the way in which it is to be applied, whether by one channel to one purpose, or by another channel to another purpose, is left more or less at our disposal. Yet as we understand him, he forbids us to believe either of these alternatives. He wishes us to regard physical energy as containing in itself the precise laws of its own distribution in one place, and yet forbids us in another to refer consciousness and its states to these laws. He says, almost in the same breath, "molecular motion produces consciousness," and then again, "physical science offers no justification for the notion that states of consciousness can be generated by molecular motion." Which does he wish us to believe? If the first, then we know what he means, and that it is pure materialism. If the second, he leaves plenty of room for the influence of free-will, in spite of that absolute limitation of the stock of physical energy in the world which he teaches. But it is hardly reasonable to take credit for *both* assumptions,—that molecular motion is the ultimate cause of everything—and that mental states are not caused by it, any more than it is caused by them.

Still more difficult is it to follow out Professor Tyndall's teaching as to moral necessity, when at length, he has somehow skipped the gulf between physics and morals, and come to assume moral necessity as the truth. He says, very justly, that if the doctrine of Necessity does away with moral responsibility, it yet leaves in all their strength the motives for discouraging actions injurious to society, and encouraging those which are beneficial to society. That is quite true. But Professor Tyndall appears to admit that though we should encourage what we find useful and discourage what is injurious by every means in our power, *approbation* and *disapprobation* are unmeaning, except on that hypothesis of moral freedom which he has rejected. We may visit what is injurious with dis-

agreeable results in order to prevent others doing it, but it is childish to talk of being morally offended with what was as inevitable as the fall of an apple when its stalk breaks. This being granted, then, being shut off from the dispensing of approbation and disapprobation, we shall be unfortunately also shut off from using by far the most powerful of the moral hindrances to wrong and crime. As the German thinker said of God that if He did not exist, it would be necessary to invent Him, so we might fairly say of moral approbation and disapprobation. If they did not exist, we should be obliged to invent them. Mere bestowal of pleasure or pain would be of little use without that approbation and disapprobation which make the pleasure and pain really effective, and give them their stimulating or deterrent power. It is not shutting up a man in prison, but shutting him up because his action is treated by society as morally disgraceful, which is the formidable thing. Professor Tyndall in giving this up, gives up the very sting of the penalty, and deprives it of more than half its deterrent effect. And as for the preacher,—why, to suppose that the preacher could preach against iniquity with good effect, as Professor Tyndall says, after he had ceased to believe that there was such a thing at all as iniquity in any sense except that in which deformity and iniquity are the same, Professor Tyndall is the most sanguine of men if he thinks so. Indeed the punishment of persons who are believed to have been incapable of doing anything but what they did, would soon become as impossible as it has already become impossible to punish criminal lunatics. Follow Professor Tyndall's principles out to their proper limits, and all punishment, properly so called, would cease.

One word more. Why does Professor Tyndall say so airily that he has no objection to talk "poetically" of a soul, though he has a strong objection to believe in one really? "If you are content to make your soul a poetic rendering of a phenomenon which refuses the yoke of ordinary mechanical laws, I, for one, would not object to this exercise of ideality." But surely he *ought* to object to it, if it is false and misleading. We mean by the 'self' a real thing, altogether



Engraved for the Publisher by J. J. Cade, New York.

FERDINAND DE LESSEPS.

(PROJECTOR OF SUEZ CANAL)

distinguishable from my organisation; and if it is not that, the use of the word 'self,' or 'I,' or 'soul' is not a harmless exercise of "ideality," but a falsehood, and a very dangerous one. We do not understand this liberty granted by Professor Tyndall to tell "poetically" all sorts of fibs which he objects to as matter of serious belief. The belief in the free self is either a most dangerous fiction or the greatest of truths, and Pro-

fessor Tyndall's willingness to deal with it in a poetic and ideal way, without insisting on the strict truth about it, as it seems to him, is not, we think, quite so catholic a feature of his character, or so creditable to him as he evidently supposes it to be. Let us tell the truth about ourselves, even if that truth be only that there is no truth to tell.—*The Spectator*.

FERDINAND DE LESSEPS.

BY THE EDITOR.

FERDINAND DE LESSEPS, the subject of our portrait this month, and universally famous as the constructor of the Suez Canal, was born at Versailles, France, on the 19th of November, 1805. Though known now chiefly for his great engineering achievement, his career to middle life was that of a diplomatist, beginning in 1825, when he was attached to the French consulate at Lisbon. In 1828 he was transferred to the consulate of Tunis, and after the taking of Algiers was charged with securing the submission of the Bey of Constantine. In 1831 he went to Egypt, where three times in succession he was temporary consul-general at Alexandria. During the occupation of Syria by Ibrahim Pasha, he did much to secure protection for the unfortunate Christians of that country, and performed an influential part in the re-establishment of peace between Mehemet Ali and the Sultan. In 1839 he was appointed consul at Malaga, and entered upon the same post at Barcelona in 1842. "During the bombardment of the latter city by Espartero in the same year," says a writer in the "American Cyclopædia," "he rendered great services to sufferers of all nations. He frequently exposed his life during the fighting to save the lives of others; his energetic remonstrances postponed the bombardment for several days, and when it took place he hired vessels and personally superintended the removal of fugitives. For this he received decorations from the governments of France, Sardinia, the Two Sicilies, Sweden, the Netherlands, and Spain; the Chamber of Commerce at Marseilles sent him a complimentary address,

while that of Barcelona placed his bust in its hall."

After the revolution of 1848 he was recalled to Paris, but returned almost immediately to Madrid as minister. The next year he was transferred to Switzerland, and then to Italy, where he was instructed to co-operate with other diplomatists in restoring order in the Papal dominions and preventing Liberal excesses from interfering with the establishment of a regular government. His work in this capacity was too favorable to the oppressed Roman people to suit the home authorities, and he was not only recalled but severely censured in an official report by the Council of State. He defended himself, however, with great ability.

In October, 1854, M. de Lesseps was invited to Egypt by Said Pasha, the new Viceroy, and while there examined thoroughly the project of the canal across the Isthmus of Suez. Two years later he drew up a memorial giving full details of the "Compagnie Universelle du Canal Maritime de Suez," a stock company for which the Viceroy had granted him a charter for 99 years (dated November 30th, 1854; confirmed January 5th, 1856). From this time, De Lesseps devoted himself entirely to the project, and by the force of energy, perseverance, and financial and diplomatic skill, raised the necessary capital, and began the work in 1859. In the prosecution of his task, he encountered many difficulties besides those interposed by nature. Eminent English engineers, among them Robert Stephenson, questioned its practicability; the British government regarded it as a political project,

and refused to give it encouragement; and various complications arose with both the Turkish and Egyptian governments. But De Lesseps triumphed over all, and on August 15th, 1869, had the satisfaction of seeing the waters of the Red Sea and the Mediterranean mingle in the Bitter Lakes. The canal was formally opened on November 17th, 1869, with grand ceremonies, in the presence of the Empress of the French, the Emperor of Austria, the Crown Prince of Prussia, Prince Amadeus of Italy, and many other distinguished personages. Even after it was opened, doubts were felt as to the utility of the work; but the experience of seven years has vindicated the sagacity of the projector, and already, to quote from McCoan's

"Egypt as It Is," reviewed in the *ECLECTIC* of last month, "this once discredited property may be pronounced nearly as great a financial as it is an industrial success."

De Lesseps has been decorated by nearly all the sovereigns of Europe, besides being the recipient of many other honors. Since the completion of the Suez Canal, he has suggested the conversion of the Desert of Sahara into an inland sea, and the cutting of a ship-canal through the Isthmus of Corinth to connect the Gulfs of Lepanto and Egina. His latest scheme, for which he has received valuable concessions from the Shah of Persia, is the "Central Asian Railway," designed to connect the south of Europe with India.

LITERARY NOTICES.

BOSTON MONDAY LECTURES. BIOLOGY, WITH PRELUDES ON CURRENT EVENTS. By Joseph Cook. With three colored plates. Boston: J. R. Osgood & Co.

On the 2d of October of last year, the Rev. Joseph Cook, whose name until then had never been heard by the great majority of readers and thinkers, began a series of "Monday Lectures" at the Meionaon, Boston. The general subject of his lectures was Biology, or, more specifically, the scientific theory of Evolution; and their object, in accordance with the avowed design of the course in which they were delivered, was "to present the results of the freshest German, English, and American scholarship on the more important and difficult topics concerning the relation of Religion and Science." The very first lecture, dealing with the evolutionary doctrines of Huxley and Tyndall, made such an impression that with the fifth lecture the lectureship had to be transferred to the Park Street Church, and shortly afterward to Tremont Temple, in order to accommodate the ever-increasing audiences. A noteworthy feature of these audiences, assembled at noon on Mondays, was that, to quote the language of the publisher's note, they "included, in large numbers, representatives of the broadest scholarship, the profoundest philosophy, the acutest scientific research, and generally of the finest intellectual culture of Boston and New England;" and through the medium of press reports and the consequent discussions, this pronounced local sensation was transmitted to all parts of the country, and even to England. Much curiosity has been felt, of

course, as to the quality of the lectures, which, begun with no preliminary trumpeting, could awaken so profound and wide-spread an interest, and it is not surprising that several editions of the volume containing them should already have passed into the hands of the reading public.

Nor is it surprising, after giving the book a careful perusal, that the testimony of readers in regard to their merits is quite as emphatic, if not so enthusiastic, as that of those who listened to them as they fell from the lips of the impassioned orator. Mr. Cook's rhetorical and literary skill would obtain him a hearing on any subject he chose to discuss; but it is very soon seen that beneath the glowing and almost too fervidly eloquent language there is a force of logic, a breadth of intellectual culture, and a mastery of all the issues involved such as are seldom exhibited by participants on either side in the great controversy between Religion and Science. It may be said unqualifiedly that the pulpit has never brought such comprehensiveness and precision of knowledge combined with such logical and literary skill to the discussion of the questions raised by the supposed tendency of biological discovery. Martineau and Dr. McCosh have equal, and perhaps greater, command of the argumentative weapons furnished by metaphysics and psychology, but the peculiar feature of Mr. Cook's work is that, joined to a German thoroughness in these important departments of knowledge, he has trained himself to cope with scientists in their special field of physical and vital phenomena. The theistic interpretation of the doctrine of evolution finds its most eloquent if not its strong-

est exponent in Mr. Cook, and his lectures will afford genuine help to many a mind that has been confused and troubled by the evidence supposed to have been furnished by science in favor of materialistic views of life.

The lectures as here given are the stenographic reports of those actually delivered, and though they have been carefully revised, retain many of the defects of platform oratory. It will always be a debated question whether an argument is most impressive when poured forth with all the ardor of spontaneous speech, or when clad in the calmer and more precise language of the study; but those who entertain the highest opinion of Mr. Cook's powers will be most earnest in the hope that he will give us a more systematic and complete exposition of his views than he can venture to offer before popular and miscellaneous audiences.

HISTORY OF THE OTTOMAN TURKS, FROM THE ORIGIN OF THEIR EMPIRE TO THE PRESENT TIME. By Sir Edward Creasy, M.A. New York: *Henry Holt & Co.*

In our August number we took occasion to review and commend Mr. Freeman's historical *brochure* on "The Ottoman Power in Europe." Readers of that work should feel it a sort of duty to possess themselves of Sir Edward Creasy's "History of the Ottoman Turks," which not only complements it by giving *in extenso* the facts which Mr. Freeman briefly summarizes, but furnishes a more or less effective antidote to Mr. Freeman's fierce denunciations of the "barbarous Turk." Sir Edward Creasy represents the average English opinion on the subject, such as was entertained prior to the shock of the Bulgarian massacres and the zealous efforts of Mr. Gladstone, Mr. Freeman, Thomas Carlyle, and others. Whatever England has done or felt in regard to the Turk and his affairs, Sir Edward sympathizes with and attempts to justify; whatever can blacken the character of the perfidious and grasping Russian he parades with evident gusto. That curious perversity of judgment by which the most politically enlightened nation of the world has been brought to champion and uphold one of the worst despotisms that ever degraded mankind is strikingly illustrated in his work; and also the convenient evasions and subterfuges by which men of more than ordinarily sober judgment will vindicate to themselves a sentiment which took its origin in the most sordid self-interest.

It must be said in justice, however, that this bias is perceptible only in the later chapters of the volume, and that Sir Edward's work is far less political and partisan in tone

than that of Mr. Freeman. It aims, in fact, at being a methodical and impartial history; and for the period prior to 1770, in which he closely follows Von Hammer's great and authoritative work, no fault can be found with either the tone or the trustworthiness of his narrative. Taken as a whole, it may be fairly said that no equally satisfactory history of the Ottoman Turks has been produced in popular form in any language, and that a deeply interesting and romantic story has been rendered fascinating by the manner in which it is told. A writer who is famous for his descriptions of battles and campaigns has found a congenial subject in the career of "a nation of warriors," as the Turks have been called; and as we read of the splendid achievements of Mahomet the Conqueror, Solyman the Magnificent, and the other martial princes of the House of Othman, we are apt to overlook, as the author himself does, the misery and degradation that lie beneath the glittering surface of military glory.

Creasy's history has already obtained the position of a standard work, the first edition having been published many years ago in England, and received the endorsement of scholars. The American edition is a reprint of the new English edition which, besides being thoroughly revised throughout with the aid of the literature that more recent times have produced, has received additional matter which brings the narrative down to the accession of the present Sultan and the very eve of the outbreak of the Russo-Turkish war.

CHOICE AUTOBIOGRAPHIES. Edited by W. D. Howells. Boston: *J. R. Osgood & Co.*

No other literary enterprise of the day promises a greater amount of enjoyable reading than this series of Mr. Howells'. Next to good biography, autobiography is the most charming species of literature, possessing in its best representatives a perennial interest and value; and a collection which promises to include in a compact and uniform edition the famous autobiographies of all languages will be a distinct and permanent addition to the resources of intelligent readers.

The four volumes of the series that have already appeared exhibit at once the richness of the material from which Mr. Howells will be enabled to draw, and the refined taste and discrimination with which he will perform his editorial work. The two first volumes contain the "Memoirs of the Margravine of Baireuth," a book which made a wonderful sensation on its first appearance sixty or seventy years ago, and which has retained its fascination for three generations of readers. The unhappy princess who wrote it was a

sister of Frederick the Great, and her lively and veracious pen furnished Carlyle with the most luminous touches in the earlier chapters of his wonderful biography of that hero. Carlyle, however, only appropriated bits here and there to suit his purposes, and the "Memoirs" as a whole are incomparably more interesting than any excerpts that could be made from them. They read, as Mr. Howells remarks, like a genuine fairy tale, yet they bear upon every feature the unmistakable stamp of truth, and they present the vividdest picture of court life that ever was drawn by pen of man or woman. The glamour of that divinity that doth hedge a king has never been so mercilessly stripped off, and the revelation is a wholesome one for a democratic nation like our own to contemplate.

The third volume contains the autobiographies of Lord Herbert, of Cherbury, a famous English diplomatist and nobleman of the time of James the First, and of Thomas Ellwood, a sturdy Quaker, who studied Latin with Milton, and suggested to the latter the theme of his "Paradise Regained." In grouping these personages together, Mr. Howells thinks he furnishes the reader an easy means for a comparison which will not be unfair to either. "They are both characters of the most distinct type, of a like heroic mould in many things, and of a similar devoutness, however diverse in their theories of religion and of life; it were hard to say which is the worse poet. Herbert represents the last phase of chivalry, the essence of which lingered in his heart and influenced his conduct, while his daring intellect questioned the highest things, and infinitely removed him from mediævalism. He was of the cosmopolitan nobility, which found itself at home anywhere in the world of courts and camps; and he was patrician to the last drop of his blood. Ellwood was of the new dispensation, which shunned the world, which bade men fashion themselves on Christ's example, and abhorred arms and vanities. . . . The courtier is picturesque and romantic in a degree which takes the artistic sense with keen delight; the Quaker is good and beautiful, with a simple righteousness that comforts and strengthens the soul."

The quality of the fourth volume will be sufficiently indicated by the statement that it contains the "Memoirs of Vittorio Alfieri," the great Italian dramatist, written by himself, together with a biographical and critical essay by Mr. Howells, which, in this case, extends to fifty-one pages. Each life in the series is prefaced by a similar essay by Mr. Howells, and these essays will probably be pronounced by the reader the most charming feature of the charming volumes in which they appear.

The books are issued in the familiar "Little Classic" style, and seldom has so much entertaining reading matter been presented in such compact and inviting shape.

THE PHYSIOLOGY OF MIND. By Henry Maudsley, M.D. New York: D. Appleton & Co.

Dr. Maudsley's "Physiology and Pathology of Mind," the first edition of which appeared in 1867, was one of the earliest works in which the physiological aspect of mental phenomena was insisted upon as against the old psychological or metaphysical method of interpretation; and it may be said to have given such an impulse to this branch of investigation that when the author began, a year or so ago, to prepare a third edition for the press, he found it necessary not only to enlarge but substantially to rewrite it in order to bring it abreast of the progress recently made in physiological and psychological knowledge. One result of this thorough revision has been the division of the original work into two separate treatises, of which the present volume is assigned to the physiology of mind, while a second will deal with its pathology, thus surveying with more completeness the field originally covered. The new edition is an improvement upon the earlier one in several respects, besides its greater size and fullness, being, as the author claims in his preface, less aggressive in tone toward opposing theories, and in particular less hostile toward the psychological method. Readers will no longer be repelled by a superfluous truculence of style; but, in spite of his soberer language, Dr. Maudsley's treatise is still interesting chiefly as the most uncompromising statement of the physiological theory of mind. Even Bain and Lewes are left far behind; and to the vital question, What is that which thinks, reasons, wills? Dr. Maudsley returns the categorical answer, It is the brain.

HISTORY OF FRENCH LITERATURE. By Henri Van Laun. Volume III. From the End of the Reign of Louis XIV. till the End of the Reign of Louis Philippe. New York: G. P. Putnam's Sons.

Our notices of the two preceding volumes of Mr. Van Laun's admirable work leave us nothing to add as to its method and quality, and it will be sufficient, perhaps, to say of this third volume that it is fully as interesting and valuable as the others, and shows that the author can deal as successfully with his contemporaries—the most difficult task of a critic—as with those earlier writers regarding whom the verdict is already substantially made up. The record covers a somewhat narrower field than was promised—ending with the close of Louis Philippe's reign instead of that of Louis

Napoleon ; but it comes sufficiently near the present to include all the great names among living or recently dead French authors—Thiers, Mignet, Guizot, Michelet, Sainte-Beuve, Victor Hugo, Alfred de Musset, Gautier, De Tocqueville, Comte, Balzac, George Sand, and the two Dumas. There is less to regret in the premature close of the narrative, for the reason that the Second Empire, like the First, acted as a sort of blight upon literature and men of letters, and seemed to paralyze the national intellect.

FOREIGN LITERARY NOTES.

SIR HENRY HAVELOCKE, M.P., intends to write a book on the campaign in Bulgaria.

MR. GLADSTONE will contribute a Preface to Dr. Schliemann's account of his excavations at Mycenæ.

IT is rumored in Paris that Victor Hugo has in his portfolio a poem of 2000 lines, entitled "Le Pape," which will appear after the decease of Pius IX.

M. THIERS, it is asserted, kept a personal diary from the year 1830 onwards. The portion relating to the history of his presidency of the Republic is written with continuity and considerable detail.

THE "Annals of Sennacherib," which were nearly completed by the late Mr. George Smith, will be brought out this year under the direction of a well-known English Assyriologist.

WE understand that the new three-volume edition of Sir J. Gardner Wilkinson's "Manners and Customs of the Ancient Egyptians," edited by Dr. Birch, will be published shortly by Mr. Murray.

MR. GLADSTONE has in the press a collection of "Essays, Letters, and Addresses." They will be divided into the following sections: Personal and Literary, Ecclesiastical and Theological, European and Historical.

THE Abbé Laffetay, the custodian of the library at Bayeux, has just published a "travail définitif" on the celebrated tapestry of Queen Matilda. He desires to prove that this beautiful art of needlework had its origin in Normandy.

Two important deeds have recently been discovered in the Public Record Office, bearing on the family history of Geoffrey Chaucer. They are written in Law Latin, and to one of them there is appended a seal unique of its kind.

MR. R. H. SHEPHERD is editing the new edition of "Poetry for Children," by Charles and Mary Lamb, together with "Prince Dorus," a fairy tale in verse, by Charles Lamb, and other poems from his pen not included in previous editions of his works.

THE members of the Hungarian Historical Society are stated to have discovered in Count Erdödy's library, at Freistadt, four ancient Turkish works, containing a rhymed history of the progenitors of the Turkish nation. These volumes are supposed to have belonged to the library of Thomas Bakács, and to be four centuries old.

MR. H. A. PAGE has in the press a small volume titled *Thoreau, his Life and Aims: a Study*. Thoreau, the author of *Walden Pond*, and one of Emerson's early friends, is among the most refined and charming of the New England contemplative writers. In England, beyond an occasional quotation, he is almost unknown. The object of Mr. Page's book is to exhibit Thoreau's love of nature in its relation to his anti-slavery agitation. It will contain many anecdotes of Thoreau's wonderful ways with animals, here first brought together.—*The Academy*.

THE title of M. Victor Hugo's new work, which is, in fact, a history of the *coup d'état*, will be 'Histoire d'un Crime: Déposition d'un Témoin.' It was written at Brussels in December, 1851, and January and February, 1852. M. Hugo was, as is well known, President of the Conseil de Résistance, and he here describes all that he did with his friends, and everything he saw day by day and hour by hour. It is said to be one of the most interesting and important works ever written by the distinguished author—as dramatic as a romance, and as startling as the reality it describes.

MR. RUSKIN declares that the chief of all the curses of this unhappy age is the universal gabble of its fools and of the flocks that follow them, rendering the quiet voices of the wise men of all past time inaudible. "This is, first, the result of the invention of printing, and of the easy power and extreme pleasure to vain persons of seeing themselves in print. This has been my main work from my youth up—not caring to speak my own words, but to discern, whether in painting or sculpture, what is eternally good and vital, and to strike away from it pitilessly what is worthless and venomous. So that now, being old, and thoroughly practised in this trade, I know either of a picture—a book—or a speech quite securely whether it is good or not, as a cheesemonger knows cheese; and I have not the

least mind to try to make wise men out of fools, but my own swift business is to brand them of base quality, and get them out of the way, and I do not care a cobweb's weight whether I hurt the followers of these men or not, totally ignoring them, and caring only to get the facts concerning the men themselves fairly and roundly stated; for the people whom I have real power to teach."

SCIENCE AND ART.

SPONTANEOUS GENERATION.—Our readers will remember that the controversy on this subject between M. Pasteur and Dr. Bastian was narrowed down, some months ago, to a very definite issue. The same experiment, performed by the two observers, yielded precisely opposite results. M. Pasteur then requested that a Commission should be appointed by the Academy of Sciences to decide between Dr. Bastian and himself, not of course on the question of spontaneous generation, but only in reference to the particular experiments with urine and *liquor potassa*. MM. Dumas, Milne-Edwards, and Boussingault were appointed for the purpose; the last-named member having been compelled, for private reasons, to withdraw, his place was taken by M. Van Tieghem. Dr. Bastian went to Paris in the middle of last month to meet the Commission. His preliminary stipulation that the enquiry should be limited to the mere question of fact, without entering on its interpretation or on its bearings upon the doctrine of spontaneous generation, appears to have been accepted by M. Dumas without consultation with his colleagues. On learning what had been done, M. Milne-Edwards summarily declined to take part in any Academy Commission which had not full power to vary the experiments at discretion. No attempt seems to have been made to arrive at a mutual understanding, and the Commission melted away without doing anything. The close of the proceedings, as described by Dr. Bastian (*British Medical Journal*, August 4), reads like a perfect comedy of errors, and is certainly in need of further explanation.

THE SOCIETY OF AMERICANISTS.—Special associations for special objects are a characteristic of the present century, so it seems quite natural that there should be a "Society of Americanists," whose object is to gather information about America. They meet once in two years; their next meeting is to be held next month at Luxemburg; and we learn from their programme that their inquiries are to apply to the times anterior to the discovery

of America by Columbus. Thus the picture-writing of the Mexicans, their civil legislation under the Aztecs as compared with that of the Peruvians under the Incas; the inscriptions in the ancient cities of Central America, the ancient use of copper, the works of the mysterious mound-builders, the comparison of the Eskimo language with the languages of Southern America; traditions of the Deluge especially in Mexico; the discovery of Brazil, and other ethnographical and palæographical subjects. If this scheme be wisely and diligently followed out, there is reason to hope that some light will be thrown into the obscurity of early American history.

SEAMEN'S REMEDY AGAINST SEASICKNESS.—Professor Xavier Landerer, of Athens, says (according to the *London Medical Record*), that a very popular remedy against this ailment, in common use among mariners in the Levant, is the daily internal use of iron. This is obtained in a very primitive way—a portion of the iron-rust adhering to the anchor and anchor-chain is scraped off and administered. At the same time a small pouch, containing roasted salt and flowers of thyme, is tied upon the region of the navel as firmly as can be borne. This is said to lessen and gradually to subdue the antiperistaltic motions of the stomach caused by the rolling of the vessel. This preparation was already known to the ancient Greeks as "thymian salt." M. Landerer says that he knows several seamen who have been cured by this treatment.

ACTION OF TOBACCO ON THE SYSTEM.—Some years ago the French Government directed the Academy of Medicine to inquire into the influence of tobacco on the human system. The report of the commission appointed by the Academy states that a large number of the diseases of the nervous system and of the heart, noticed in the cases of those affected with paralysis or insanity, were to be regarded as the sequence of excessive indulgence in the use of this article; and it is remarked that tobacco seems primarily to act upon the organic nervous system, depressing the faculties and influencing the nutrition of the body, the circulation of the blood, and the number of red corpuscles in the blood. Attention is also called to the bad digestion, benumbed intelligence, and clouded memory of those who use tobacco to excess.

MORE PERFECT GALVANIC BATTERIES.—In spite of all the progress that has been made in electric science since first Volta put together his "crown of cups," a perfect galvanic battery is yet to seek. M. Onimus has done something toward this in availing himself of the virtues of the new, tough, and supple ma-

terial which bears the name of parchment-paper. Every electrician knows that the great theoretical merits of Professor Daniell's "constant" battery are counterbalanced by the trouble, care, and annoyance which it entails. All double liquid batteries have hitherto proved bulky, vexatious, and expensive; but M. Onimus simplifies matters by using parchment-paper instead of a porous cell, the copper spiral encircling the parchment, which is wrapped around the cylinder of zinc, and the pair of elements being simply plunged into a solution of sulphate of copper.

SUN-SPOTS AND STORMS.—Mr. Henry Jeula, of Lloyd's, has lately written to the *Times* indicating that there appears to be some connection between the prevalence of sun-spots and the number of wrecks posted annually in Lloyd's "Loss Book," and that this may constitute a further link in the evidence connecting sun-spots with the phenomena of weather. He derives his data from two complete cycles of eleven years each, extending from 1855 to 1876. He divides each series of eleven years into three periods, and finds that there are two minimum periods of four years at the beginning and end of each cycle, having between them a minimum period of three years.

POLARISATION OF DIFFRACTED LIGHT.—The change of polarisation which light undergoes when diffracted by an edge or a grating has been subjected to investigation by many distinguished physicists, notably by Stokes, Holtzmann, Lorenz, and Mascart. Prof. Stokes obtained from theoretical considerations a formula which connected together the direction of vibration of the ether particles in the incident beam, the direction of vibration in the diffracted beam, and the angle of diffraction. The experiments with a grating on glass, made with a view to verify this formula, led to irregular results, but seemed to confirm Fresnel's hypothesis that in plane polarised light the direction of vibration is perpendicular to the plane of polarisation. Holtzmann, however, and other physicists, have deduced from their experiments a different conclusion—viz., that the ether particles vibrate in a direction parallel to the plane of polarisation. The recent experiments of Dr. Fröhlich, of Buda-Pesth (*Annalen der Physik und Chemie*, neue Folge, i., 321), lead to the following conclusions among others: (1) Confirmation of the result already found by earlier observers that in plane polarised light the direction of vibration is perpendicular to the plane of polarisation. (2) The direction of vibration in a ray of light proceeding from a centre in any direction is perpendicular to the direction of propagation. (3) The direction of vibration

in the diffracted ray is a function of the nature of the reflecting surface (of the grating), of the angle of incidence, and of the angle of diffraction; but is entirely independent, on the other hand, of the intervals between successive lines of the grating, of the refrangibility of the light, and of the order of spectrum, and is also unaltered when rays of different refrangibilities and different orders of spectra are superposed.

DISINFECTANT FOR THE SICK ROOM.—Ozone, the newest and the least stable of the gases, has recently been made to do good service in the sick-room. It makes short work with those miasmata and organic impurities of vitiated air which the Italians describe by the expressive name of malaria, and which every physician knows to be among the most baneful influences with which the convalescent patient, whose tenure of life is not yet quite assured, has to contend. A mixture should be made of permanganate of potash, peroxide of manganese, and oxalic acid, in equal parts, and two large spoonfuls with some water put into a plate and placed on the floor of the sick-chamber. Care should be taken, however, to remove steel fenders and fire-irons, and to cover up brass door-handles, since ozone will rust all metals meaner than gold and silver.

VARIETIES.

A SPECIAL CORRESPONDENT'S OUTFIT.—The special correspondent of the Paris *Temps* communicates to his paper the following list of articles with which war correspondents accompanying the Russian army in Asia must be supplied: 1. A passport from the general Staff, with which, immediately upon his arrival, the correspondent has to present himself to the Chief of the Corps or detachment which he means to accompany. By means of it he is, for instance, to have each telegram and letter acknowledged by the general Staff. 2. A number of photographs of himself for the chiefs of the different corps and detachments. One of them he is to keep in doubtful cases as to his identity, to compare with the rest. 3. An emblem in the form of a shield, in the centre of which the letter K is affixed to a black and yellow ribbon. This mark is worn in the button-hole, to serve as a passport that he may walk about without being molested. 4. A "Padorojna," or march route of the Government, whereby the correspondent may secure post-horses at each relay, except in cases of *vis major*. 5. An "Atkoiti List," entitling him to an escort, he being obliged to have with him a Cossack or Tshapar for safety's sake. 6. A private servant, versed, if possible, in several languages. 7. A double-barrelled gun, for casual hunting, the right

barrel for shot, while the left is rifled, adapted to the shooting of balls, also a revolver and a dirk-knife. 8. A European saddle for himself and one for his servant, with bridle and bit. 9. A tent with a Persian carpet and hammock. 10. A "bourdonk," with at least six "tunks" of cachetic wine. "Bourdonk" is a sort of canteen made out of the whole skin of a hog, or the hide of a ram or ox, retaining the shape of the animal. A "tunk" holds five bottles. 11. A large pair of saddle-bags full of provisions, preserves, tea, sugar, cognac, &c., &c., tin plates, table-set, and everything required to sustain life in a perfectly wild country; cigars, cigarettes, and tobacco. 12. Quinine and extract of genti. 13. A very handy portfolio, with writing material. 14. As little baggage for himself as possible; a warm overcoat and blanket are indispensable in the mountains and at night. 15. A black suit of clothes, vest, pantaloons, white cravat, light-colored gloves, and a hat for wear and tear. 16. A number of articles impossible to be mentioned. 17. Money—Russian half-imperials, Turkish medschidjes, which are twenty-franc pieces; the Russian paper money, if possible, must be of recent date, being better current. The Russian army passes gold coin. The correspondent is also to be supplied with a goodly quantity of Russian silver change. He is to find room for all of the articles mentioned in a telega, *i.e.*, a vehicle used in that part of the world. The most essential is not to be forgotten, which, strange to say, is Persian insect powder.

DR. JOHNSON AS A MAN.—No man, said one who knew him, loved the poor like Dr. Johnson. His own personal expenses did not reach £100 a year, but his house in Bolt Court, after the receipt of the pension, became a home for as many helpless as he could support and aid. In the garret was Robert Levet, who had been a waiter at a French coffee-house, and had become a poor surgeon to the poor. He was unable to help himself, when Johnson became his friend, and gave him a share of his home, with freedom to exercise his art freely in aid of the poor. Levet was Johnson's companion at breakfast, lived with him for thirty years, and died under his sheltering care, never allowed to think of himself as a poor dependent, never so regarded by true-hearted Samuel Johnson. . . . Not one of these companions was allowed to feel dependence; most of them had soured tempers, and they quarrelled with one another, but each felt the whole sweetness of Johnson's nature. When he was asked why he bore with them so quietly, his answer was, "If I did not shelter them no one else would, and they would be lost for want." There was

another "pensioner" in his household, the cat. He observed that she liked oysters, and he would go out himself to buy them for her, lest if servants were put to the trouble they should grudge the cat her enjoyments, dislike her, and use her ill. When Johnson took his walk in Fleet street, he found his way into sad homes of distress, which had been made known to him by Levet or found by his own kind eyes. He visited the sick and the sad, helped them, and interceded for them with his friends. He always had small change in his pocket for the beggars; and if told that they would only spend it upon gin, thought it not wonderful that they should be driven even in that way to take the bitterness of life out of their mouths. He was slow to blame those who were tried by adversity. He himself had been tried sorely, and had risen nobly above every degrading influence; but he knew what trial meant, and he wrote from his heart at the close of his life of Savage, "Those are no proper judges of his conduct who have slumbered away their time on the down of plenty; nor will any wise man presume to say, 'Had I been in Savage's condition, I should have lived or written better than Savage.'" When Johnson was himself sometimes in want of a dinner, after his first coming to London, he would slip pennies into the hands of ragged children asleep at night on the door-sills, that when they awoke in the morning they might find the possibility of breakfast. One night he found a wretched and lost woman so lying, worn by sickness; carried her on his back to his own home; had her cared for until health was restored; and then found her an honest place in life. Thus it was that Samuel Johnson had learnt Christ.—*Library of English Literature, edited by Professor Henry Morley.*

VILLANELLE.

O SUMMER-TIME, so passing sweet,
But heavy with the breath of flowers,
But languid with the fervent heat,

They chide amiss who call thee fleet,—
Thee, with thy weight of daylight hours,
O summer-time, so passing sweet!

Young summer, thou art too replete,
Too rich in choice of joys and powers,
But languid with the fervent heat.

Adieu! my face is set to meet
Bleak winter, with his pallid showers,—
O summer-time so passing sweet!

Old Winter steps with swifter feet,
He lingers not in wayside bowers,
He is not languid with the heat;

His rounded day, a pearl complete,
Gleams on the unknown night that lowers;
O summer-time, so passing sweet,
But languid with the fervent heat!

EMILY PFEIFFER.

"UNDER THE LILACS," by Louisa M. Alcott,

A SERIAL STORY FOR GIRLS.

"TOWER-MOUNTAIN," by Gustavus Frankenstein,

A "ROBINSON CRUSOE" STORY.

Begin in the December Number of St. Nicholas.

EDITION, 100,000 COPIES.

Some idea of the attractions offered in the CHRISTMAS HOLIDAY NUMBER of St. NICHOLAS, of which 100,000 copies will be



*Christmas comes but once a year,
When it comes it brings good cheer.*

issued, may be gained from the following: There are poems by HENRY W. LONGFELLOW and WILLIAM CULLEN BRYANT; a fine hitherto unpublished sketch of Boy Life, by the late THEODORE WINTHROP; and a short story by the author of "ALICE IN WONDERLAND," a new fairy story, "SWEET MARJORAM DAY," by FRANK R. STOCKTON, "THE PETERKINS' CHARADES," by LUCRETIA P. HALE; a poetic riddle by DR. J. G. HOLLAND, and a comparison between the manners of young folks in old times and nowadays, by GAIL HAMILTON.

Of the story element, the brightest feature is the beginning of the new serial by Miss ALCOTT, entitled "UNDER THE LILACS," with illustrations by Mary Hallock Foote.

"The story is quiet and lovely in feeling, full of life, and of quaint, jolly bits of childhood. It is characteristic of Miss Alcott in her Best Vein; but it is not intended for young readers of vitiated taste who need, or think they need, sensational stories. The BOY IN THE STORY is a character that will charm all BOYS fully as much as its girl readers."

The Christmas Number contains also the opening of a new Serial Story for Boys, a tale of tropical life, by GUSTAVUS FRANKENSTEIN, entitled "TOWER-MOUNTAIN," admirably illustrated by the artists Moran and Kelly; A PORTRAIT OF MISS ALCOTT, with a sketch of her life; several poems by TWO LITTLE AMERICAN GIRLS; a PLAY, and a CHRISTMAS CAROL (set to music); and half a dozen complete short stories, bright, funny, exciting and pathetic, etc., etc.

Subscription Price, \$3.00 a Year, postage paid. Single copies, 25 cents each. Sold by all Book-Sellers and News-Dealers.

SCRIBNER & CO., 743 Broadway, New-York.

The NEW COVER is by the English Artist, WALTER CRANE,—the famous designer of "The Baby's Opera."



ST. NICHOLAS FOR 1878,

Besides Miss Alcott's serial for Girls, and the three serials for Boys, to follow each other in rapid succession, will contain a short serial story by the AUTHOR OF "THE SCHÖNBERG-COTTA FAMILY," and an article, "AROUND THE WORLD IN A YACHT, BOYS!" has been promised by a brilliant writer, now on the actual tour of the world in his own yacht. There will be contributions by a DAUGHTER OF THE FAMOUS PETER PARLEY, and a Letter to Young Americans by

GEORGE MACDONALD.

The "HOW" SERIES of instructive papers, by various authors, will tell HOW to bind your own books; HOW they mine coal; HOW to enjoy yourselves at home; HOW to be an agreeable guest; HOW to entertain company; HOW to be a carpenter; HOW to make an ice-boat; HOW to build a house; HOW India rubber is gathered; HOW matches are made; HOW money is made; HOW mackerel are caught; HOW they laid the Atlantic cable; HOW they mine in California; HOW they work in the tea-country; HOW to be a parlor magician; etc. There will be also a series of stories and sketches of Foreign Life,

TRAVEL AND ADVENTURE,

such as "Old Nicolai" (a Russian story), "A Day among the Welsh Castles," "Easter in Germany," "The Indians of the Amazon," "How Kitty was Lost in a Turkish Bazaar," "Master Montezuma" (a Mexican story), "Hanna, the Lapp Maiden," and many others.

"Jack-in-the-Pulpit," "Young Contributors' Department," "Letter-Box," "Riddle-Box," and "For Very Little Folks," will be continued.

The four bound volumes of St. NICHOLAS already published are the most wonderful, beautiful and attractive Christmas Present for Young People. Each volume is complete in itself. Vols. 1 and 2, \$3.00 each; vols. 3 and 4, \$4.00 each.

Grand Christmas Holiday Number.

Eclectic Magazine

OF

FOREIGN LITERATURE, SCIENCE, AND ART,
1878.

—♦♦—
(THIRTY-FOURTH YEAR.)
—♦♦—

LITERATURE.

In General Literature, the ECLECTIC presents, each month, an array of instructive and entertaining articles which is surpassed by none of the literary monthlies. Its selections are made from all the English periodicals, and occasionally from those of France and Germany, and cover a literature incomparably richer than any other to which the reader can find access. The founding of the *Nineteenth Century* and the marked improvement of other magazines from which the ECLECTIC draws its material, rendered the volumes for 1877 richer than any in the history of the periodical, and those for 1878 will undoubtedly maintain the improvement. Recent issues have contained articles by the Right Hon. W. E. Gladstone, James Anthony Froude, Matthew Arnold, Charles Kingsley, Francis Power Cobbe, Leslie Stephen, Arthur Helps, Alfred Tennyson, Thomas Hughes, William Black, Mrs. Oliphant, Thomas Hardy, Turgeneff, William Morris, Miss Thackeray, and others equally eminent.

SCIENCE.

To this department, the ECLECTIC gives more space than any other magazine in the world not exclusively scientific. It gathers from the whole field of foreign current literature the best articles of the most authoritative thinkers and writers; such as Profs. Huxley and Tyndall, Richard Proctor, B.A., Prof. Owen, Dr. W. B. Carpenter, Max Muller, J. Norman Lockyer, St. George Mivart, and E. B. Tylor. *No exclusive prominence is given to any particular phase of scientific opinion, but place is given impartially to the most valuable articles on both sides of the great themes of discussion.*

FICTION.

The ECLECTIC offers its readers the best serial stories to be had, together with the short stories for which the English magazines have a high and deserved reputation.

EDITORIAL DEPARTMENTS.

These comprise *Literary Notices* (dealing with current home books), *Foreign Literary Notes, Science and Art* (summarizing briefly the new discoveries and achievements in this field), and *Varieties* (consisting of choice extracts from new books and foreign journals). *No similar publication attempts anything like these departments.*

STEEL-ENGRAVINGS.

Each number contains a *Fine Steel-Engraving*—usually a portrait—executed in the best manner. These engravings are of permanent value, and add much to the attractiveness of the Magazine.

—♦♦—
TERMS:—Single copies, 45 cents; one copy, one year, \$5; five copies, \$20. Trial subscription for three months, \$1. The ECLECTIC and any \$4 magazine to one address, \$3. *Postage free to all subscribers.*
—♦♦—

SPECIAL OFFER TO SUBSCRIBERS.

The Publisher takes pleasure in announcing that he has made arrangements which enable him to furnish to every subscriber to the ECLECTIC (for one dollar in addition to the regular subscription price) a large and fine steel-engraving, entitled

"HIGHLAND PETS."

This engraving is copied from one of Landseer's most celebrated paintings, and represents a Highland girl surrounded by a group of fawns, which she is feeding, while her young brother holds a stately pair of antlers, probably the trophy of some former chase. The size of the plate is 18×27 inches, printed on heavy plate paper 28×35 inches, making a picture suitable for the wall of any room. The regular price of this engraving is \$5, but we furnish it *only* to subscribers to the ECLECTIC. It will be sent prepaid, carefully wrapped on a roller, to any part of the United States, without injury. *Any subscriber to the ECLECTIC who will send us the name of a new subscriber (with \$5), will receive a copy of the engraving FREE; with \$6, two copies of the engraving will be sent.*

E. R. PELTON, Publisher, 25 Bond Street, New York.

PUBLISHER'S MISCELLANY. *July 1877*

NEW BOOKS.—Henry Holt & Co. have published James Baker's "Turkey," a companion to Wallace's "Russia." Lieut. Col. James Baker, brother of Sir Samuel Baker, Pasha, and obviously possessor of the family faculties for authorship and travel, has lived for three years in Turkey, has travelled on horseback over a thousand miles in that country, and made numerous journeys on the Black Sea and Water-Courses. His book is claimed to be of a somewhat more popular character than Mr. Wallace's book on Russia, but based, like it, on personal experience as well as historical study and researches into social and statistical questions. It is written up to the present time and treats the question of the day. In good times the sale of it would probably be very large; as it is, the plates have been put to press five times. One of the most important ventures of the same house, which they had in preparation for years, is just launched. It is "Goodholme's Domestic Cyclopædia," which they will sell only by subscription. This work was undertaken because it was felt that a good book was needed for general reference in household matters. The contributors hold high positions in their professions. The house will publish Thornbury's "Life of Turner," the artist, with facsimile illustrations in colors from some of Turner's original drawings. It will contain sixteen newly-discovered letters of Turner's, a complete catalogue of all Turner's engraved works, a catalogue of his pictures exhibited in the Royal Academy and British Institution, and a list of the principal sales of his works since 1833, with prices, etc.

AN AUSTRALIAN HEROINE.—The bravest girl in Australia is Grace Vernon Bussell. The steamer *Georgette* was wrecked off the west coast, near Perth; a small boat had been capsized in the surf, and women and children were struggling in the water. On the crest of a precipitous cliff appeared the figure of a young lady on horseback. To the sailors on the stranded vessel it seemed utterly impossible that a horse and its rider should be able to descend that precipice. But the young lady

never faltered. She plunged down at full speed, and reaching the shore, spurred her horse into the boiling surf. There were two lines of roaring breakers. With splendid pluck she dashed through them and reached the boat, to which the affrighted women and children were clinging. Her horse stumbled over a hawser which stretched between the wreck and the small boat, but she clung to the saddle and brought the women and children to land. There was still a man left on board the boat. She plunged into the breakers again and brought him safe to the shore. While those whom she had saved were rescuing those who remained on the wreck, the heroic girl, drenched with the sea-foam and half fainting with fatigue, galloped a dozen miles home to have relief sent to the half-drowned, half-naked folks whom she had left on the beach. Her sister, Mrs. Brockman, took horse, galloped that night through the woods to the shore, taking tea, milk, sugar, and flour for the destitute people; and the next day the rescued were brought to Mr. Brockman's house and cared for. The anxiety and excitement proved fatal to Mrs. Brockman, who took a severe cold, and died eventually of brain fever. Grace Vernon Bussell still lives.

JOURNALISTIC NOTES.—The *Christian Union* is now printing an interesting series of articles on "How to Spend the Summer," written by people who themselves know how. The following is the schedule of titles: "Camping Out," by Rev. W. H. H. Murray; "Yachting," by Rev. Stephen H. Tyng, Jr., D.D.; "Pedestrianism," by Howard Crosby, D.D.; "The White Mountains," by Henry Ward Beecher; "Summer on a Farm," by Donald G. Mitchell (Ik Marvel); "A Short Trip to Europe," by Austin Abbott; "Summer Schools," by Rev. E. P. Thwing; "Summering in Colorado," by H. H.; "Summer Camp-Meetings," by Rev. Lyman Abbott; "Canoeing," by the Commodore of the New York Canoe Club; "Summer Cottage Housekeeping," by a Cottage Housekeeper; "How to Stay at Home without Grumbling," by Gail Hamilton. This series

is timely, and seems to meet the wants of all classes of readers.

HOMŒOPATHIC REMEDIES.—Messrs. Boericke & Tafel, of this city, make a specialty of putting up in neat boxes, ready for immediate use, complete sets of homœopathic remedies, containing all the standard medicines for family use. These cases vary in size and contents, from a neat, compact mahogany case of fifty-two vials—price, with book, \$8—to a much larger case of the same material, containing one hundred and thirty-eight vials—price, with a more complete book, \$19. We know of no more profitable investment for a family than one of these cases. The slight ailments of children especially can generally be warded off by a timely use of these remedies, and the feeling of relief and comfort to the mother at having given some suitable remedy in accordance with the plain directions is hardly to be counted in money. We refer our readers to the advertisement of Messrs. Boericke & Tafel in this number of the *ECLECTIC*.

A LAND FULL OF GOLD AND SILVER.—A correspondent of the *London Times*, writing from Alexandria, informs the public that Capt. Burton, the African traveller, has made a "find" of unusual interest. At the request of the Khédive, he has visited the "Land of Midian," the desolate region on the eastern side of the Gulf of Akabah, the easternmost of the two long and narrow estuaries in which the Red Sea ends. Accompanied by M. George Marie, a French engineer, Capt. Burton landed in Midian on April 2, and in an expedition of some weeks explored a region full of ruined towns, built of solid masonry, with made roads, aqueducts five miles long, artificial lakes, and massive fortresses, all marking a wealthy and powerful people. Their wealth was based on mining operations, and Capt. Burton reports the existence of gold, silver, tin, antimony, and turquoise mines. The auriferous region is extensive; indeed, the discoverer believes he has opened up a California, and the Khédive proposes to have the country worked by European capitalists. It will be remembered that in the Bible, Midian is always described as a land full of metals, especially gold, silver, and lead. It is more than probable that Solomon's Ophir was situated there, as the small ships in which he imported gold, ivory, and peacocks were launched at the head of the Red Sea. Midian is part of the Egyptian Viceroyalty.

BOOKS RECEIVED.

[The publisher will send any book reviewed in the *ECLECTIC*, or any other new publication, postage paid, on receipt of the price.]

Chedayne of Katono. A Story of the Early Days of the Republic. By AUSBURN TOWNER. New York: Dodd, Mead & Co. 12mo, cloth, pp. 606. Price, \$1.50.

Eugénie. By BEATRICE MAY BUTT. Leisure Hour Series. New York: Henry Holt & Co. 16mo, cloth, pp. 312. Price, \$1.25.

Reconciliation of Science and Religion. By ALEXANDER WINCHELL, LL.D. New York: Harper & Bros. 12mo, cloth, pp. 403. Price, \$2.00.

Ariadne. The Story of a Dream. By "OUIDA." Philadelphia: J. B. Lippincott & Co. 16mo, cloth, pp. 384. Price, \$1.75.

A Family Feud. After the German of Ludwig Harder. By MRS. A. L. WISTER. Philadelphia: J. B. Lippincott & Co. 16mo, cloth, pp. 238. Price, \$1.25.

"Eastward Ho!" or Leaves from the Diary of a Centennial Pilgrim. Being a Truthful Account of a Trip to the Centennial City via Washington, and the return via Niagara Falls, with a Graphic Description of the Exhibition itself. By DAVID BAILEY, Teacher, Highland, Ohio. David Bailey. 8vo, cloth, ill., pp. 89. Price, \$1.25.

How to Camp Out. Hints for Camping and Walking. By JOHN M. GOULD. New York: Scribner, Armstrong & Co. 16mo, cloth, pp. 134. Price, \$1.00.

Harry. A Poem. By the author of "Mrs. Jerminham's Journal." New York: Macmillan & Co. 16mo, cloth, pp. 152. Price, 25 cts.

The Forces of Nature. A Popular Introduction to the Study of Physical Phenomena. By AMÉDÉE GUILLEMIN. Translated from the French by Mrs. Norman Lockyer, and Edited, with Additions and Notes, by J. Norman Lockyer, F.R.S. Illustrated by nearly 500 engravings. New York: Macmillan & Co. Part I. 8vo, paper, pp. 40. Price, 40 cts.

In Change Unchanged. By LINDA VIL-LARI. Leisure Hour Series. New York: Henry Holt & Co. 16mo, cloth, pp. 308. Price, \$1.25.

PUBLISHER'S MISCELLANY. *Aug 1877*

RAILWAY CONSTRUCTION.—Statistics of railroad construction in this country are given. The increase in the number of miles constructed in 1876 over the increase in the two preceding years is quite marked, and shows that the lowest point of depression in railway construction in this country was reached in 1875. The revival in railway building commenced in the latter half of 1875. Of the railway mileage of 1876 nearly one fourth was narrow gauge. At the close of 1876 the country had one mile of railroad for about every five hundred and seventy-five inhabitants. In one particular the work of 1876 was much like that of 1875; to a very great extent it consisted of the construction of local lines of no great length. There were, however, a greater number of long lines built than in 1875, and the average mileage is greater than for two years previous. Adding 16,300 miles for extra tracks, sidings, etc., the total length of tracks at the beginning of the year is estimated at 93,814 miles—nearly enough to go four times around the world.

A FUTURE GREAT WHEAT REGION.—Indian Commissioner Smith reports that he was surprised at the fertility of the country bordering on the Red River of the North and its tributaries, and at the heavy tide of immigration that is setting in on both sides of the boundary line between Minnesota and Manitoba. He thinks this section one of the finest wheat-growing countries in the world, and says that it will soon be occupied by a large and thriving population. The Canadian Government is doing a good deal to encourage emigration to the lands lying on their side of the line, and keeps an agent at Duluth to afford aid and information to immigrants. Access is had to the region by way of the Northern Pacific Railroad to Morehead, and by steamers which run down the Red River as far as Fort Garry.

POPULARITY OF THE NEW FOUR PER CENT LOAN.—The popular subscriptions to the new loan are being made with greater rapidity than was anticipated by the Secretary of the Treasury. At the outset he estimated that

\$15,000,000 would be taken in this way, but he now thinks that the total will considerably exceed that sum, and may amount to \$20,000,000, or even more. It is probable that the orders on the last few days of the thirty, during which the bonds are offered for sale at par, will be greater than those for all the rest of the time. It naturally takes a little time for the merits of the loan to become fully appreciated. The advantages of investing idle funds in the new bonds will scarcely be fully brought before the public by advertisements and newspaper articles until the thirty days' limit has nearly expired.

EUROPEAN ARMIES.—The fifth edition of Baron de Worms's book, "The Policy of England in the East," contains some interesting tables on the population and armies of the different European nations. According to these returns, the Ottoman Empire, inclusive of the tributary States, comprises 18,000,000 Turks, 1,500,000 Arabs, 600,000 Tartars, Turkomans, and Zingarees, 5,123,000 Roumanians, 2,000,000 Greeks, 4,800,000 Bulgarians, 500,000 Servians, and 800,000 Bulgarians, professing the Mohammedan faith. In Servia there are 450,000 Roman Catholics, and 100,000 in Albania. Altogether the population of the empire reaches 52,092,068; but this is inclusive of nearly 11,000,000 Nubians, 5,000,000 Egyptians, and 8,000,000 Roumanians and Servians. In another table, the effective of the armies of the different powers are stated as follows: Russia, 1,789,571; Germany, 1,248,834; France (inclusive of the reserves and territorial army), 1,118,525; Austria, 964,268; Italy, 871,871; England, 655,808; and Turkey, 629,736. In the Turkish army there are 154,376 regulars to 475,360 irregulars, while in the other European armies, with the exception of England, there is about an equal proportion of active and reserved forces. In respect of fleets, France has 63 ironclad vessels, as against 61 possessed by Great Britain, but the latter power has 449 other war vessels, as compared to only 366 in the French navy. Russia has 31 ironclads, and 124 other men-of-war; Turkey has 21 ironclads; Italy, 17;

Austria, 12; Germany, 8; and Greece, 1. Montenegro has only 190,000 inhabitants, with an annual revenue of £5,000, but it has 26,000 soldiers—in other words, all the able-bodied men are under arms.

BESSEMER STEEL.—In the ten years during which the Bessemer steel industry of this country may properly be said to have had an existence, there has been produced a total of 1,163,028 net tons of steel rails. It has really had a slow growth until within the last few years, but it is to-day a leading branch of the iron industry of the country. In 1876 it consumed one fourth of the total pig iron product of that year, and produced more tons of steel rails than the country had produced of iron rails in any year prior to 1866.

REMUNERATION OF AUTHORS.—Mr. Motley received from the Harpers as copyright the comfortable sum of \$60,000; while Prof. Charles Anthon got upon his writings, \$100,000. The firm paid to Mr. Jacob Abbott \$50,000; to the late Albert Barnes \$75,000; and to Marcius Wilson, the author of their series of school readers, about \$200,000.

XYLOGRAPHY.—Mr. Quaritch, the London biblioplist, has discovered an old English example of the art called Xylography. There is no block-book of English origin mentioned in Sotheby's *Principia*, and it was not supposed that any thing of the kind had ever existed. The curiosity in question is an Almanac or Calendar, printed from engraved blocks of either wood or metal, and supposed to have been produced in the monastery of St. Albans before the year 1537. It is on a sheet or strip of vellum, 30 inches by 4, and is full of little figures of the English saints whose names occur in the Calendar; while on the reverse there is a series of pictured illustrations of the Months, similar to those in the early Missals and MSS.

BANANAS have been successfully cultivated in the open air at Santa Barbara, Los Angeles, and other places on the southern coast of California. Until recently it was supposed that oranges could not be raised in California as far north as San Francisco. Now it is established that this fruit will do well in all the middle counties of the State, and extensive preparations are being made for the culture of oranges in many localities. It is believed that experience may show a similar condition of things in regard to the banana.

ENGLISH LOW PRICES.—Among the queer things of commerce is the fact that beef, copper, and so many other commodities which are sent from the United States to England, sell for lower prices in England than they do here. The facts in regard to copper are peculiar. The exportation now amounts to 16,000,000 pounds annually, and the product sells in London from $2\frac{1}{2}$ to 5 cents a pound cheaper than here. If this can be done, there is no need of maintaining the duty of five cents a pound on copper, for this industry is evidently able to take care of itself. To maintain the duty is to abuse protection.

BOOKS RECEIVED.

[The publisher will send any book reviewed in the *ECLECTIC*, or any other new publication, postage paid, on receipt of the price.]

Phyllis. A Novel. By the DUCHESS. Philadelphia: J. B. Lippincott & Co. 16mo, cloth, pp. 336. Price, \$1.50.

Poems of Places. Edited by HENRY W. LONGFELLOW. Spain, Portugal, Belgium, and Holland. Two volumes. Boston: J. R. Osgood & Co. 16mo, cloth, pp. 256, 274. Price, \$1 each.

English Grammar as Bearing upon Composition. By ALEXANDER BAIN, LL.D. New York: Henry Holt & Co. 12mo, cloth, pp. 358. Price, \$1.40.

Poet and Merchant. A Picture of Life from the Times of Moses Mendelssohn. By BERTHOLD AUERBACH. Translated by Charles T. Brooks. Leisure Hour Series. New York: Henry Holt & Co. 16mo, cloth, pp. 460. Price, \$1.25.

Lola: A Tale of Gibraltar. By ARTHUR GRIFFITHS. Leisure Hour Series. New York: Henry Holt & Co. 16mo, cloth, pp. 354. Price, \$1.25.

Appletons' Hand-Book of American Cities. With Principal Routes of Travel and Maps. New Edition for Season of 1877. New York: D. Appleton & Co. 12mo, paper, illustrated, pp. 162. Price, 50 cents.

Appletons' Hand-book of American Summer Resorts. With Maps. New Edition for Season of 1877. New York: D. Appleton & Co. 12mo, paper, illustrated, pp. 166. Price, 50 cts.

The Marquis of Lossie. A Romance. By GEORGE MACDONALD. Philadelphia: J. B. Lippincott & Co. 8vo, paper, pp. 245. Price, 75 cents.

PUBLISHER'S MISCELLANY. *Sept 57*

EXCESS OF PRODUCTION OVER POPULATION.—Ninety cotton operatives, with an average food-purchasing power each of \$300 (increased from \$200 since 1838 by increase of wages), will now purchase and consume farm-products, or their equivalents, to the aggregate value of \$27,000 per annum; requiring the present labor of 135 farmers, producing \$200 per annum through improved machinery and processes (as compared with \$100 in 1838), over and above the subsistence of themselves and families. The ratio of industrial or economic equilibrium between cotton-cloth producers and the producers of other commodities essential to a comfortable livelihood in the United States in 1876 was therefore approximately as 90 to 135; or, in other words, the labor of 235 persons is as effective in 1876, in meeting the demands of the country for cloth and food products, as was the labor of 691 persons in effecting similar results in 1838; and, as a consequence of this change in the power of production, the labor of 466 other persons have, within this time and within the special industrial sphere under investigation, been rendered unnecessary; and they have been compelled to enter into relations with new wants and new capabilities of purchase in order to find employment. Results similar, and possibly even more striking, are afforded by the analysis of other leading American industries. Thus, in the manufacture of boots and shoes, three men working with machinery can do at present what, prior to 1860, required the labor of six men to effect; while the individual or *per capita* consumption of boots and shoes in the United States has probably been more uniform during the same period than is the case with almost any other commodity. At a convention of the stove trade last year (1876) in St. Louis, it was also officially reported, that under what may be called a healthy trade there was at least 33 per cent greater present capacity for making stoves in the United States than the country requires; and that three men now, with the aid of machinery, can produce as many stoves as six men unaided

could have done in 1860. In the manufacture of straw goods, 300 hands in one of the largest factories in New England do more with the sewing-machine than what a comparatively few years ago required a thousand to effect when sewing of the braid was done by hand; and the steam-press turns off four hats to the minute, in place of the old rate of one hat to four minutes. Similar results, derived from consideration of our industries as a whole, are also given in the last national census, which shows that while the increase in population in the United States from 1860 to 1870 was less than 23 per cent, the gain in the product of our so-called manufacturing industries during the same period, measured in kind, was 52 per cent, or near 30 per cent in excess of the gain in population.—*David A. Wells, North American Review.*

PAY OF CABINET MINISTERS.—Some one having stated in a London paper that the ex-cabinet Ministers of Great Britain receive a pension of \$10,000 a year, Mr. Gladstone has thought proper to state publicly that cabinet ministers, with the exception of the Lord Chancellor, who receives \$25,000 a year for life, no matter how brief his tenure of office, are entitled to \$10,000 a year after three years' service, but they rarely accept it. Lord Beaconsfield was in receipt of such a pension while last out of office, but Gladstone has never taken it. Though a younger son, he had \$500,000 from his father, and his wife inherited the extensive estates of her brother. At one time, however, he was embarrassed by heavy losses in an unproductive mine, and ten years ago rumors as to his impecuniosity were circulated. He has a large family.

THE REGENERATION OF BULGARIA.—The regeneration of Bulgaria is already begun on the principles which have long prevailed in Poland. The Mussulman land-owners are to be even more completely expropriated than the Polish nobility; and they will also be expelled from their native country. The Bulgarian Christians will probably be disappointed if they expect to receive a free gift of the

confiscated lands. The Russians have heavy expenses to recoup, and the estates from which the owners are expelled will probably be sold to native purchasers to defray a portion of the cost of the campaign. No precedent can be found for so sweeping a measure of spoliation on religious grounds since the expulsion of the Moors from Granada. The difficulty of reconciling the Mohammedan and Christian populations has often been recognized; but it was not foreseen that the knot would be cut without scruple by Russia. The definitive character of the proposed conquest is shown by the order that all official business shall be transacted in the Russian language. The Bulgarians perhaps by this time understand the meaning of disinterested liberation.—*The Saturday Review*.

WHEAT AND COTTON CROP.—The estimates of the Agricultural Department place the total of the wheat crop of the United States for the present year at upwards of 325,000,000 bushels, 65,000,000 bushels more than that of last year. Of the total quantity, fully 100,000,000 bushels will be available for exportation. The cotton prospects were rarely more favorable than they are at present, and it is estimated that the product will be upwards of 4,500,000 bales. The sale abroad of the surplus products of the country will undoubtedly have a good effect upon the general business interests of the country; and a country with the enormous productions of the United States cannot for any very long period suffer from "hard times."

TELESCOPES.—The Clarks, of Cambridge, Mass., are acquiring great fame for the magnitude and perfection of their telescopes. They are now making one fifteen feet long, with an object-glass of eleven inches in diameter, for the government observatory at Lisbon, to cost \$6000, and be used for photographing the sun. Princeton College is having one made, to cost \$4000, and talks of a larger one. The Clarks are also to make a gigantic one for Yale College, but it will take several years to complete it, and it will cost \$50,000.

STEWART'S CATHEDRAL.—The cathedral at Garden City, Long Island, to be erected by Mrs. A. T. Stewart, as a memorial of her husband, will be 150 feet in length, and 96 feet wide across the transepts and porches. The spire will be 197 feet high. Below the organ and robing-room a mortuary chapel and crypt

will be prepared for the remains of Mr. Stewart. The chapel will be 37 feet long and 20 feet wide. The belfry will contain a chime of thirteen bells. The estimated cost of the cathedral is \$700,000.

Mrs. GAINES has finally come to her own forever. No further legal proceedings can be taken against her. The contest which for forty years she has waged against those who would despoil her of her property and fame is ended, and nothing now can prevent her from entering upon her inheritance. All appeal has been abandoned. When she first instituted her claim, it was thought to be the preposterous work of an erratic woman. The Supreme Court of the United States has declared that her claim and character can neither be assailed nor assailed.

MISSING NUMBERS OF ECLECTIC.—We are in want of a few copies of *Eclectic* for March, 1865, and October, 1867. Parties having these numbers, if they will send them to us, will receive in exchange for each of them any five of our *Eclectic* Engravings they may select, or we will make selections for them.

BOOKS RECEIVED.

[The publisher will send any book reviewed in the *ECLECTIC*, or any other new publication, postage paid, on receipt of the price.]

General History of Connecticut, from its Earliest Settlement under George Fenwick, to its Latest Period of Amity with Great Britain prior to the Revolution, including a description of the Country and many curious and interesting Anecdotes. By a GENTLEMAN OF THE PROVINCE (Rev. Samuel Peters, LL.D.) New edition, edited by Samuel Jarvis McCormick. New York: D. Appleton & Co. 12mo, cloth, pp. 285. Price, \$1.50.

Mesmerism, Spiritualism, etc., Historically and Scientifically Considered. Being Two Lectures delivered at the London Institution. With Preface and Appendix. By WILLIAM B. CARPENTER, M.D., LL.D. New York: D. Appleton & Co. 12mo, cloth, pp. 158. Price, \$1.25.

The Johnson Manor. A Tale of Olden Time in New York. By JAMES KENT. New York: G. P. Putnam's Sons. 12mo, cloth, pp. 304. Price, \$1.50.

"*The Jukes*." A Study in Crime, Pauperism, Disease, and Heredity. By R. L. DUGDALE. With an Introduction by ELISHA HARRIS, M.D. Third Edition, revised. New York: G. P. Putnam's Sons. 12mo, cloth, pp. 120. Price, \$1.25.

PUBLISHER'S MISCELLANY. Oct 1877

POPULATIONS OF RUSSIA AND TURKEY.—At the Statistical Society, Mr. E. G. Ravenstein, F.R.G.S., recently read an elaborate paper on the populations of Russia and Turkey. The former of these empires has 84,584,482 inhabitants, the latter only 25,986,868, or, including Egypt, Tripoli, and Tunis, 43,408,800. The population of Roumania is 4,850,000, of Servia 1,352,500. The population of Russia increases at the rate of 1.1 per cent per annum, the increase amongst the Jews being at least double what it is amongst the Christians. With respect to Turkey there exist no data for calculating the increase, though it is most probable that other dominant race does not increase at all, a fact accounted for by vicious practices prevailing amongst the women, and by the sacrifices demanded from it for the defence of the empire. Some curious facts were communicated with respect to the proportions between males and females. Throughout Asiatic Russia and in a considerable portion of European Russia the male sex preponderates. The same fact has been noted in Roumania, in Greece, and in other parts of Europe. The author thus summed up the results of his investigations: In the Russian Empire there are 100 Russians to every 50 members of the nationalities, and 100 Christians to every 16 Mohammedans and Pagans. In Turkey, on the other hand, 100 Turks have opposed to them 197 members of other nations, and 100 Mohammedans 47 Christians.

MADAME BONAPARTE.—Of Madame Bonaparte, now nearly one hundred years old, and living in Baltimore, a leading banker of that city says that he knows "no man capable of creating legitimately, with so small a capital, the large fortune amassed by Madame Bonaparte. She has no accomplishment in any branch of art, and although her love of study remains, her fast-increasing blindness deprives her of this resource. Her wit is still incisive, her conversation replete with interest, her memory retaining minutely every incident and figure of the wondrous diorama that has unrolled before her eyes close upon one hundred years."

PAN-PRESBYTERIAN COUNCIL.—It is not the Englishman, Scotchman, nor Irishman who has walked off with the honors of oratory at the great Pan-Presbyterian Council at Edinburgh, but the American and the Frenchman. Out of the three hundred men who composed that remarkable body, the one who quickest commanded attention is said to be Dr. Stuart Robinson, of Louisville, Ky. Whenever he rose to speak, you could hear a pin fall; then presently there was such an ebullition of applause or such a roar of laughter that you could hardly hear what the speaker said. Dr. Hall, Dr. Adams, and Dr. Paxton, of New York, had their admirers, who pronounced them the most eloquent men living. But the professors and teachers, whether Scotch or American, were rather inclined to admire the passionate eloquence of the French, and the finest impression was made by Dr. Godet, of Neuchâtel, long known for his commentaries on St. Luke and St. John.

COMMON SENSE CHAIRS.—Under this name, Mr. F. A. Sinclair, an extensive manufacturer of Mottville, N. Y., has produced a chair which is well worthy of its title. These chairs are made of hard wood, chiefly maple and white elm, and are well seasoned; the seats are made of ash splints, and the chair thus made is strong, durable, and in every way reliable. The most important thing about these chairs, however, is that somehow or other they seem to fit the back of every one, and when one is once comfortably ensconced in one of Mr. Sinclair's rockers it requires considerable energy, especially in warm weather, to make an effort to get out of it. If our readers wish "to take it easy," let them get one of these common-sense chairs. Send for circular and full particulars to F. A. Sinclair, Mottville, N. Y.

It is said that Mr. William Black's next story will appear in *Good Words*, and that he will take his readers back to the West Highlands, and picture the old style of life there; then the scene will shift to London.

PRINCE GUSTAVUS of Vasa, died a few days since at Pilnitz, at the age of seventy-eight.

A GOOD PAINT.—The introduction by the Averill Paint Company, New York, of a paint mixed ready for use, has done a great deal towards simplifying the art of painting. Its merit is so well attested by those who have used it during the past ten years, that its superiority may be regarded as established beyond question. The ingredients of which it is composed are so combined, that they do not separate after the paint has been applied; by this process, the wearing properties of the paint are greatly improved. The Centennial Commission, in awarding it the highest medal, refer to it as a valuable discovery. Our readers would do well to send to the Office of the Company, 32 Burling Slip, New York, for a sample card showing the tints and colors in which it is prepared.

MUNIFICENT BEQUEST TO YALE COLLEGE.—By the death of Mrs. Caroline M. Street, of New Haven, which occurred on the 23d of August, Yale College will immediately come into bequests valued at \$250,000, in favor of the corporation and fellows. Among the pieces of property given by husband and wife are the New Haven House, opposite the college; the Street Building, on the corner of Chapel Street and State; the building occupied by the New Haven Union. The money derived from the sale of the New Haven House is to complete the Yale Art Building; that from the Union Building, for the encouragement of art in the college; and that from the Street Building, for the founding of the Titus Street Professorship in the Yale Theological School. Mrs. Street was the mother of the wife of Admiral Foote.

"THE NINETEENTH CENTURY."—The July number of the *Nineteenth Century*, the new magazine which has stepped at once into the highest literary position, is remarkable not only for the general ability of its articles, but for the social standing of the contributors, two being members of the House of Lords, and five members of the House of Commons, viz.: Lord Stratford de Redcliffe (on "Turkey"), the Bishop of Gloucester and Bristol (on "The Ridsdale Judgment and its Results"), Mr. Gladstone, M.P. (on "Authority in Matters of Opinion"), Mr. Stansfeld, M.P. (on "Medical Women"), Sir Thomas Bazley, M.P. ("University for Manchester"), Mr. Thomas Brassey, M.P. ("Round the World in the Sunbeam," first article), and Mr. Grant Duff, M.P. ("Five Nights' Debate").

A SUBMERGED CITY IN THE LAKE OF GENEVA.—A strange discovery is reported from the Lake of Geneva. A tourist having lost his trunk, two divers were employed to search for it. While they were below water they found what they supposed to be a village, since covered by the lake. Their statement led to an investigation of the spot by the municipal authorities, who took measures to ascertain the truth of the extraordinary account of the divers. On covering the placid surface with oil, these latter were able to distinguish the plan of a town, streets, squares, and detached houses, marking the bed of the lake. The ruddy hue which characterized them led the observers to suppose that the buildings had been covered with the famous vermilion cement which was used by the Celts, Cimbri, and the early Gauls. There are about two hundred houses arranged over an oblong surface, near the middle of which is a space more open, supposed to have been used for public assemblages. At the eastern extremity lies a large square tower, which was taken for a rock. A superficial investigation seems to indicate that the construction of these buildings dates from some centuries before our era. The council of Vaud have decided to have the site of the dwellings enclosed by a jetty stretching from the land, and to drain off the water, so as to bring to light what promises to be one of the most interesting archaeological discoveries of our day. —*London Daily Telegraph*.

A PERSON, in the course of some remarks in a prayer-meeting, having several times observed that he should never forget the dying words of his brother, the pastor suggested that it might be well for him to repeat them; whereupon, with some hesitation and scratching of his head, he said that they had slipped his mind.

BOOKS RECEIVED.

[The publisher will send any book reviewed in the *ECLECTIC*, or any other new publication, postage paid, on receipt of the price.]

Elementary Lessons in Physical Geography. By ARCHIBALD GEIKIE, LL.D., F.R.S. Illustrated with Woodcuts and Plates. London and New York: Macmillan & Co. 16mo, cloth, pp. 375. Price, \$1.75.

Gérard's Marriage. From the French of ANDRÉ THURIET. (Collection of Foreign Authors, No. 2.) New York: D. Appleton & Co. 16mo, paper, pp. 217. Price, \$1.75.

Personal Appearance and the Culture of Beauty, with Hints as to Character. By T. S. SOZINSKEY, M.D. Philadelphia: Allen, Scott & Co. 16mo, cloth, pp. 196. Price, \$1.25.

PUBLISHER'S MISCELLANY. *Nov 1877*

NEW CATALOGUE OF ENGRAVINGS.

WE have just issued an entirely new catalogue of fine steel engravings, large size, for framing and general decoration. The catalogue gives the name of the painter of the picture from which the engraving is copied, and also the size of the engraved surface of the picture, so that they can be framed with wide or narrow margin, as the taste of the purchaser may dictate.

We give, in our list, over five hundred beautiful pictures, by the most celebrated ancient and modern artists. The prices have been largely reduced since the issue of our former catalogue; in some cases fully one half. At the present prices of good steel engravings there is no excuse for the miserable chromos which so often meet the eye, even in dwellings of refinement and good taste. Now and then one meets with a chromo that is really a work of art, but such cases are rare, as the market for years past has been crowded with chromos that are not cheap at any price.

We shall be happy to send our catalogue to any one on application, and have also included in it a complete list of our ECLECTIC Engravings.

M. THIERS has left to the State not only all his collections, but also the immense historical materials which he had gathered for his works, as well as the house which he had partly rebuilt with the funds voted by the National Assembly after the defeat of the Commune. We understand that this house will be converted into a museum. The packets of MSS., comprising documents of the highest political and diplomatic interest, which he used for his "History of the Revolution" and his "History of the Consulate and the Empire," and which had been given him or transcribed for him by the surviving members of the families of the historical personages concerned, or by the chanceries of the various countries, will be deposited in the National Archives, after the friends of the deceased have selected from them all matter of a purely personal nature.

ENGLISH PENSIONS.—Queen Victoria's allowance from the nation during the past year was about \$3,083,545. The Prince of Wales

received \$200,000; the Duke of Edinburgh, \$125,000; the Duke of Connaught and Prince Leopold, each, \$75,000; the Princess of Wales, \$50,000; the Duke of Cambridge, \$60,000; the Crown Princess of Prussia, \$40,000; Princess Alice, Princess Helena, Princess Louise, and the Duchess of Cambridge, each, \$30,000; and the Princess Mary of Teck, \$25,000. The Lord Chancellor gets \$25,000; Lord Eversley, ex-Speaker of the House of Commons, has a pension of \$20,000; and three ex-Cabinet Ministers, Sir George Grey, Mr. Spencer Walpole, and Mr. Thomas Milner Gibson, have each \$10,000. The Duke of Marlborough has \$20,000 a year on account of the services of the winner of Blenheim, while a like sum is secured to the present and next Dukes of Wellington, but to no further Duke, on account of Waterloo. It appears that the nation in 1806-7 annexed in perpetuity a pension of \$17,500 to every Earl Nelson to the end of time. Every Lord Exmouth, as long as the title shall last, will draw \$10,000 from the nation; but Lords Seaton, Napier of Magdala, Keane, Hardinge, Gough, and Raglan, and their next immediate successors in their respective titles, and no descendants in a further degree, will enjoy the same amount respectively. The pensions, each of \$5,000, enjoyed by Sir W. Fenwick Williams, Sir Henry M. Havelock, and Lady Havelock, and by the widows of Lords Elgin and Mayo, Governors-General of India, are for life only. The heirs of William Penn get no less than \$20,000. There are still living old servants of Queen Charlotte to draw \$1,550 a year, while one of those of George III. draws \$50 quarterly; \$47,795 yearly goes into the pockets of persons who were put upon their Civil Lists by Kings George IV. and William IV.

NEW VARIETY OF COTTON.—We referred some time ago to a discovery in Egypt of a new variety of cotton, which grows to a considerably greater height than the ordinary kind, and furnishes a much larger yield—almost fourfold. Since then further details have been published in regard to this plant, from which we learn that it still has the favorable opinion of experts, and that it promises to be an important feature in the cotton industry. The quality is said to be very superior.

THE JOHNS HOPKINS UNIVERSITY.—President Gilman says, in regard to the past year's work in Johns Hopkins University, that he is entirely satisfied with its present condition and its outlook. Two new appointments to fellowships have been made during the summer: Mr. F. Franklin, of Baltimore, a graduate of Columbian College, in Washington, who distinguished himself last year as a graduate student in mathematics, and Dr. Sehler, of Cleveland, O., whose original work on zoölogy gives promise of marked attainment. There is now one vacancy. The staff at present consists of three Fellows devoted to the study of languages, three in mathematics and engineering, three in chemistry, one in physics, two in philosophy, two in biology, and three in history and political science. In addition to the Fellows, there were thirty-four graduate scholars enrolled on the register last year. Fifteen of these were physicians of Baltimore, who were attracted to the biological laboratory by the reputation of Dr. Martin, and by the facilities there provided for working with the best apparatus and instruments. There has been no formal action by the faculty or trustees in regard to the question whether the institution would become an examining as well as a teaching University, and give its diplomas and certificates of proficiency, like the London University, upon the severe tests of an examination; but all opinions expressed are favorable to such a plan. Great diligence, good order, enthusiasm in work at personal sacrifice, and freedom from levity marked the study of the year.

CARRIER PIGEONS.—The employment of carrier pigeons in war, for transmitting information in regard to the result of races and other contests, has long been practised. A more recent use of this agency is proposed by the Light-house Establishment of Great Britain, for communicating between light-houses or light-ships and the shore, for the purpose of conveying intelligence of disaster or danger. The only question now is as to the extent to which the bird may bear confinement in a light-ship exposed to the constant motion of the waves.

THE OLD STONE MILL.—The "Old Stone Mill" of Newport is one of the few objects in America the date of whose origin has been lost. It is a cylindrical tower, probably about twenty-five feet high, resting on eight rude columns, and stands within the inclosure of

Touro Park, so thickly draped in ivy and woodbine that its gray walls are screened from view. Some antiquaries have asserted that the old mill was built by the Norsemen some time in the eleventh century; but the generally accepted theory is that it was erected by Governor Benedict Arnold. In his will, dated 1677, he speaks of his "stone-built Wind Mill in y^e town of Newport." Windmills were necessary to the early settlers, and this one is a remarkable specimen of masonry, upon which time seems to have made no impression, except to increase its firmness. It is one of the "sights" of Newport, and is carefully preserved by the city.

BOOKS RECEIVED.

[The publisher will send any book reviewed in the *ECLECTIC*, or any other new publication, postage paid, on receipt of the price.]

Nicholas Minturn. A Study in a Story. By J. G. HOLLAND. New York: Scribner, Armstrong & Co. 12mo, cloth, illustrated, pp. 418. Price, \$1.75.

The Church of the Apostles. By the Right Rev. WM. INGRAHAM KIP, D.D., LL.D. New York: D. Appleton & Co. 12mo, cloth, pp. 174. Price, \$1.25.

American Addresses, with a Lecture on the Study of Biology. By Professor THOMAS H. HUXLEY. New York: D. Appleton & Co. 12mo, cloth, pp. 164. Price, \$1.25.

Spirite. A Fantasy. From the French of THEOPHILE GAUTIER. Collection of Foreign Authors. No. 3. New York: D. Appleton & Co. 16mo, pp. 214. Price, paper, 50 cents; cloth, 75 cents.

Devil Puzzlers, and Other Studies. By FREDERICK B. PERKINS. New York: G. P. Putnam's Sons. 16mo, paper, illustrated, pp. 215. Price, 50 cents.

Boston Monday Lectures. Biology, with Preludes on Current Events. By the Rev. JOSEPH COOK. With Three Colored Plates. Boston: J. R. Osgood & Co. 12mo, cloth, pp. 325. Price, \$1.50.

One Year Abroad. By the author of "One Summer." Boston: J. R. Osgood & Co. 16mo, cloth, pp. 247. Price, \$1.25.

A Counterfeit Presentment. A Comedy. By W. D. HOWELLS. Boston: J. R. Osgood & Co. 16mo, cloth, pp. 155. Price, \$1.25.

PUBLISHER'S MISCELLANY. Dec 1871

THE NEW YORK LIFE INSURANCE CO.—We take pleasure in calling attention to the report of Superintendent Smythe, of the Insurance Department of this State, on the examination of this company. The result of this examination is most satisfactory, both to the company and to the policy-holders, and will give renewed confidence in the business of life insurance generally. Few persons have any idea of the vast labor involved in a rigid and searching examination into the affairs of such a great corporation. In the matter of examination of titles and value of the real estate held by the company, the services of forty-one gentlemen of character and experience were employed, and an examination of forty-nine pieces of property amounting to \$2,541,576.46, and of mortgages amounting to \$17,354,847.84, was carefully conducted. In the matter of cash securities on hand, their actual value over cost amounted to \$580,515.76, showing how carefully these investments had been made. The actual surplus over all liabilities of the company, as shown by this report, with every doubtful asset excluded, is \$5,962,878.79. The report concludes as follows:

This exhibit clearly establishes the fact that where a life insurance company is honestly ably, and prudently managed, there is no occasion to force a showing of solvency by including in its assets prospective value of real estate, and excesses of premium payments to be received.

For the reasons above given, the superintendent has no hesitation in stating that this great corporation is entitled to public confidence, and its officers to his warmest commendation.

PETROLEUM.—It is estimated that 20,000 oil wells have thus far been dug in Pennsylvania and West Virginia, at an aggregate cost of \$192,000,000. They have yielded about 88,000,000 barrels of oil, valued at the wells at \$300,000,000, or \$400,000,000 at the seaboard.—*Baltimore American*.

"CLEOPATRA'S NEEDLE," during all the thirty-four hundred years since it was hewn out of the granite beds of Syene, never encountered such a remarkable adventure as now. Taken down from its second place at Alexandria—cradled in a new cylindrical vessel designed

especially for it—floated past the Pillars of Hercules, and far out on the "unknown seas"—cut adrift in a fearful storm, and left, as a compassless vessel of the Pharaohs, to be borne whither the great ocean currents might carry it—then found again, and safely drawn, let us hope to its new home—is there any thing more strange and picturesque in the history of any human monument? The faith of Mr. Dixon, the contractor, in defiance of the declaration of a captain, has been singularly justified. Within a few hours after he declared his belief that the floating obelisk was not lost, came the news that it had been verily found. We have a special reason for rejoicing, since its loss might have jeopardized the securing of its fellow for own city. And if the great, heavily-freighted craft had continued to drift on the open ocean, as dangerous to vessels in the night as any rock or reef, it would have become a new flying Dutchman—a mysterious terror of the sea. It will reach England, enriched for all time by a fresh association, as marvellous as it was unexpected.

NEW YORK AND LONDON TIME.—The difference in time between New York and London is a curious feature in ocean telegraphy. The London banker is in the full swell of traffic when the New York agent is first thinking of "getting up." At noon the London markets are cabled to this city, where they arrive at 7 o'clock in the morning of the same day. The London agent of the New York press telegraphs the most important news issued in the *London Times* at 6 o'clock in the morning. It reaches here at 1 o'clock the same morning, just in time to be inserted in the New York journals, whose readers have the same matter that the Londoner digests with his breakfast.

KINDERGARTEN GUIDES.—Mr. E. Steiger, of this city, has just issued the Kindergarten Guide, designed for self-instruction of mothers and nurses in the use of kindergarten gifts. They consist of three neatly bound volumes, commencing with the most simple instruction for very young children, and coming down to the forms and colors of every object one sees around them. They are intended to illustrate the use of the various beautiful gifts for chil-

dren, which comprise a large portion of the kindergarten system. Send for circular of kindergarten gifts, to E. Steiger, 22 and 24 Frankfort Street, city.

PONGO.—The young gorilla "Pongo" has been recently taken from Berlin to the Westminster Aquarium, London. He has been living thirteen months in the temperate zone, and rarely, even in Africa, does the gorilla live long in captivity. Pongo is less than four years old, and it will be about eighteen months before he will commence the dangerous period of teething. He is nearly four feet in height, is covered with black or iron-gray hair, and has coal-black face, feet, and hands. The hands are the most strikingly human part of this animal. He has an enormous appetite, eating sometimes meat, but chiefly milk, fruits, vegetables, and eggs, which he requires several times a day. He has also learned the accomplishments of drinking beer and smoking, but he wishes an amber mouthpiece to his cigarette, not seeming to like the taste of tobacco. He sleeps twelve hours, but then it must be remembered he is very young.

WHERE THE GREATEST OF THE JOHN SMITHS IS BURIED.—Opposite Newgate is St. Sepulchre's Church, of which John Rogers, the Smithfield martyr, was vicar, chiefly modern, but with a remarkable porch which has a beautiful fan-tracery roof. Many are the Americans who visit the interior to see a gray grave-stone "in the church choir, on the south side thereof," with an almost obliterated epitaph which began—

"Here lies one conquer'd that hath conquer'd kings!"

for it covers the remains of Capt. John Smith (1579-1631), "sometime Governor of Virginia and Adm'rall of New England," and author of many works upon the history of Virginia. The three Turks' heads which are still visible on his shield of arms were granted by Sigismund, Duke of Transylvania, in honor of Smith's having, in three single combats, overcome three Turks and cut off their heads in the wars of Hungary, in 1602.—*Good Words.*

NUMBERS OF ECLECTIC WANTED.—We are in want of the following numbers of *Eclectic*, March, 1885, and October, 1887. Parties having these numbers and wishing to dispose of them, can do so by writing to our office and stating price wanted.

BOOKS RECEIVED.

[The publisher will send any book reviewed in the *ECLECTIC*, or any other new publication, postage paid, on receipt of the price.]

Physiological Aesthetics. By GRANT ALLEN, B.A. New York: D. Appleton & Co. 12mo, cloth, pp. 283. Price, \$1.50.

Lotos-Flowers, Gathered in Sun and Shadow. By MRS. CHAMBERS-KETCHUM. New York: D. Appleton & Co. 12mo, cloth, pp. 205. Price, \$1.50.

The Tower of Percemont. A Novel, from the French of GEORGE SAND. (Collection of Foreign Authors, No. 4.) New York: D. Appleton & Co. 16mo, pp. 237. Price, paper, 50 cents; cloth, 75 cents.

Diana. A Novel. By SUSAN WARNER, author of "Wide, Wide World." New York: G. P. Putnam's Sons. 12mo, cloth, pp. 400. Price, \$1.75.

Surly Tim and other Stories. By FRANCES HODGSON BURNETT. New York: Scribner, Armstrong & Co. 16mo, cloth, pp. 270. Price, \$1.25.

A Knight of the Nineteenth Century. By Rev. E. P. ROE. New York: Dodd, Mead & Co. 12mo, cloth, pp. 582. Price, \$1.50.

Elsie's Children: A Sequel to "Elsie's Motherhood." By MARTHA FINLEY (FARQUHARSON). New York: Dodd, Mead & Co. 16mo, cloth, illustrated, pp. 340. Price, \$1.25.

The Story of Avis. By ELIZABETH STUART PHELPS. Boston: J. R. Osgood & Co. 12mo, cloth, pp. 457. Price, \$1.50.

Hawthorne, and other Poems. By EDMUND CLARENCE STEDMAN. Boston: J. R. Osgood & Co. 16mo, cloth, pp. 134. Price, \$1.25.

China Painting. A Practical Manual for the use of Amateurs in the Decoration of Hard Porcelain. By LOUISE McLAUGHLIN. Cincinnati: Robert Clarke & Co. 12mo, boards, pp. 69. Price, 50 cents.

Monday Chats. By C. A. SAINTE-BEUVE. Selected and translated from the "Causeries du Lundi," with an Introductory Essay on Sainte-Beuve. By WILLIAM MATHEWS, LL.D. Chicago: S. C. Griggs & Co. 12mo, cloth, pp. 386. Price, \$2.

American Scenery.

FINE ENGRAVINGS FOR HOME DECORATION.

We are Agents for the following exquisitely engraved Steel Plates, which have been painted and engraved by the finest American Artists, at a cost of over \$15,000.

The subjects are from pictures expressly painted for these engravings by the following artists:

Sent by mail or express, prepaid, on receipt of price.

Printed on Fine Paper, 18×23, India Proofs only, \$1.50 per copy.

SUBJECT.	DRAWN OR PAINTED BY	ENGRAVED BY
Chocorua Peak, White Mountains,	J. W. CASILEAR, N. A.	R. HINSHELWOOD.
Trenton Falls, New-York,	J. F. KENSETT.	R. HINSHELWOOD.
Upper Ausable Lake, Adirondacks,	J. D. SMILLIE.	J. D. SMILLIE.
Sugar-Loaf Mountain, Winona, Minnesota,	W. MOMBERGER.	V. BALCH.
Natural Bridge, Virginia,	R. HINSHELWOOD.	R. HINSHELWOOD.
Dismal Swamp, North-Carolina,	R. GIGNOUX.	J. DUTHIE.
Wharf and Shipping, New-York City,	S. COLMAN.	H. S. BECKWITH.
Near Leeds, Green County, New-York, . .	GEORGE INNESS.	R. HINSHELWOOD.
Junction of the St. Mary's and St. Joseph's Rivers, near Fort Wayne, Indiana,	W. MOMBERGER.	V. BALCH.
Indian Rock, Narragansett Bay,	M. F. H. DE HAAS.	R. HINSHELWOOD.
Croton Point, Hudson River,	WILLIAM HART.	R. DUDENSING.
Wabash River, near Vincennes, Indiana, . .	W. MOMBERGER.	R. HINSHELWOOD.
On the Housatonic, near Stockbridge, Mass.	J. M. HART.	R. HINSHELWOOD.
Lake George, New-York,	W. MOMBERGER.	R. HINSHELWOOD.
On the Prairie,	WILLIAM H. BEARD.	R. HINSHELWOOD.
Hayne's Falls, Catskill Mountains,	W. MOMBERGER.	J. IVES PEASE.
Lake Champlain, from St. Albans, Vermont,	R. W. HUBBARD.	W. WELLSTOOD.
Niagara Falls,	W. MOMBERGER.	R. HINSHELWOOD.
On the Susquehanna, near Great Bend, N. Y.	GEORGE H. SMILLIE.	J. D. SMILLIE.
Upper Mississippi, near Lansing, Iowa, . .	W. MOMBERGER.	R. HINSHELWOOD.
On the Pemigewasset, New-Hampshire, . .	GEORGE L. BROWN.	S. A. SCHOFF.
Evansville, on the Ohio,	W. MOMBERGER.	R. HINSHELWOOD.
The Meadows, Orange Co., New-York, . . .	W. WHITTREDGE.	C. ROST.
Yosemite Valley, California,	THOMAS HILL.	R. HINSHELWOOD.

Address.

E. R. PELTON, Publisher,
25 Bond Street, New-York.

GOODHOLME'S DOMESTIC CYCLOPÆDIA,

Principally written or revised by the following authorities:

Calvert Vaux, Architect of the Central Park, and Thomas Wisedell, Architect: Locating, Building, and Repairing. Lewis Leeds, Sanitary Engineer: Warming and Ventilation. Col. George L. Waring, of Ogden Farm: Drainage, The Garden, The Dairy. George Fletcher Babb, Architect: Decoration as Applied to Walls, Floors, and Furniture. Mrs. Elizabeth S. Miller, author of "In the Kitchen," and Giuseppe Rudmani, late Cook in the Cooking School, St. Mark's Place, New York, and Chef de Cuisine, Newport: Cooking and Domestic Management. Austin Flint, Jr., M.D., Professor in Bellevue Medical College: Dietetics and Alcoholic Beverages. Abraham Jacobi, M.D., Professor in the College of Physicians and Surgeons: Diseases and Hygiene of Children. William T. Lusk, M.D., Professor in Bellevue Medical College, late Editor of the New York Medical Journal: General Medicine. S. G. Perry, D.D.S.: The Teeth. Elwyn Waller, Ph.D., Superintendent of Laboratory in the Columbia College School of Mines: Domestic Chemistry (Disinfecting, Cleaning, Dyeing, etc.) Leslie Pell-Clark, Veterinary Surgeon of Ogden Farm: The Horse. Johnson T. Platt, Professor in the Yale Law School: Business Forms and Legal Rules.

One vol., 8vo, about 652 pages, with a full Index, and over 300 Illustrations.

THE HOUSE is elaborately treated, information being given, with abundant illustrations, upon the selection of a site, planning building in either stone, brick, or wood, draining, warming, ventilating, and finishing in taste.

FURNITURE.—Practical information is given touching every article in use from garret to cellar, with the cost of all those of average excellence; lists with prices, for furnishing three houses of different sizes and degrees of elegance; and a separate article on DECORATION. The article is copiously illustrated from examples in the revived constructive style.

REARING OF THE FAMILY.—The Advice begins at the Birth of the Infant, and follows it through the disorders of childhood and puberty, and the diseases and accidents of life.

THE MEDICAL ARTICLES constitute a comprehensive guide in the domestic treatment of disease and accident. Courses of treatment safe for unprofessional persons to use are indicated, and no others. Bandaging and treating fractures and dislocations are described and illustrated. Much attention is given to Hygiene.

FOOD is treated of in its physiological aspects, and every important process of cooking is lucidly explained.

COOKING RECEIPTS.—The collection is believed to be superior to any hitherto made, including several thousand collected from private sources and books which have stood the test of use.

HOUSEHOLD MANAGEMENT.—Servants, Laundry-Work, Cleaning, Destruction of Vermin, Serving the different Meals, etc., etc.

DRESS.—A description is given of fabrics commonly used, and advice on Cutting and Fitting, with full illustrations, and directions for making the various articles of Dress. To this is added information concerning the Toilet.

DOMESTIC ANIMALS.—Directions for Selecting, Keeping, and Treating the Diseases of HORSES, COWS, and POULTRY are given; and every process of the DAIRY, from Milking of the Cow to making Butter and Cheese, is described. The article on BEE-KEEPING will probably prove valuable to many.

GARDENING and FLORICULTURE are explained, and the principal plants raised for food or ornament in this country are described, and the best method of growing, whether indoors or out, is given.

WEIGHTS and MEASURES (including the METRIC SYSTEM) are elaborately treated.

BUSINESS FORMS are given, and the LAW bearing on them, as well as the laws (so far as it is safe for laymen to rely upon them) affecting the ordinary transactions of life.

WHAT LEADING JOURNALS SAY OF IT.

"But the writers go straight to the mark, which is the 'practical information' promised in the title of the work. The nearest approach to a disquisition is Mr. George Fletcher Babb's admirable article on Decoration as applied to walls, floors, and furniture; but anybody who masters its condensed, unpretentious exposition of principles will find it one of the most practical of all this Cyclopædia's guides to right living. Mr. Babb is one of half a dozen experts whose names are published in connection with the editor's, and are a guaranty of the soundness of their doctrine. In the Medical Department, for example, we have Drs. Austin Flint, Jr., Jacobi, and Lusk; for the Culinary Department, Mrs. E. S. Miller and Giuseppe Rudmani are responsible; Col. George E. Waring deals with drainage, the garden, dairy, etc., etc. Many single articles produced under these auspices are worth the price of the work, and there are very few households in which the compilation as a whole would not have a daily usefulness."—*New York Nation*.

"It aims to give a 'short cut' to the knowledge which housekeepers are always wanting at a moment's notice, and to find which they know not where to go. That the book is highly successful in this aim appears both from the names on its title-page, and from an examination of its contents."

Prices and Styles of Binding.—Extra Cloth, \$5.00; Enamelled Cloth, \$5.50; Library Leather, \$6.50. Half Morocco, \$7.50.

* * * This book is sold only by subscription. * Where we have no agent we will send it, carriage paid, upon receipt of price.

All communications for agencies, terms, etc., should be addressed to

HENRY HOLT & CO., 25 Bond Street, New York.

tion of the character of its contents. . . . This trustworthy and highly useful work limits itself to just the necessary information which may be got within a small compass. The work supplies an actual need, and deserves a kind reception from the public."—*N. Y. Times*.

"The information is copious and valuable."—*New York Tribune*.

"Turning the pages of the handsome volume at random, one finds such subjects as 'Alcohol,' 'Biscuit,' 'Cake,' 'Canning Fruits,' 'Copper Ware,' 'Decoration,' 'Drugs,' 'Food,' 'Furnishing,' 'Houses,' 'Infant,' 'Mincedmeat,' 'Parrots,' 'Potatoes,' 'Reed-Birds,' 'Sarsaparilla,' 'Snake-Bites,' 'Tea,' 'Turkey,' 'Velvet,' 'Warming,' 'White Fish,' 'Wine,' etc. This will show the great value of the work. So far as we know, no similar publication has hitherto been issued in this country, and we are sure the book will meet a 'felt want.'"—*Independent*.

"It is about the size of one volume of the American Cyclopædia, and covers—in several thousand articles alphabetically arranged—the whole range of household topics. It is at once a cook-book, hand-book of medicine, floral guide, and a score of other books together."—*Boston Transcript*.

ETCHINGS.

We have added to our Catalogue of *Fine Engravings* the following list of *Etchings*. They are copied from paintings by the most celebrated masters, and are engraved in the finest manner. India proofs only. Sizes are given to frame. **Price, \$1 each.** Sizes to frame about 12x15 inches.

Le Liseur.....Meissonier.
Studying his Part.....Firmin-Girard.
Une bonne Histoire.....Herrmann.
La Bergère.....Bougeureau.
Organ-Grinder.....Knaus.
Homeless.....Doré.
Un Marche d'Esclaves.....Gerome.
L'Aimé de Livre.....Meissonier.
Carneval de Venise.....Becker.
A Tankard of Ale.....Meissonier.
Amateurs de Peinture.....Meissonier.
Les Bibliophiles.....Fortuny.
Fumeur Flamand.....Meissonier.
Jouer de Flute.....Meissonier.
Le Polichinelle.....Meissonier.
L'Audience.....Meissonier.
Who goes there?.....Meissonier.
Anatomist.....Max.

We can also furnish a set of Fifty Dietrich Etchings, comprising a great variety of subjects—Cattle, Sheep, Landscapes, Interiors, Figures, etc. **Price, 50 cts. each.**

We will send any of above by mail or express, prepaid (carefully done up), on receipt of price, or they can be sent per express C. O. D. Address,

E. R. PELTON, Publisher,
25 Bond Street, New York.

NEW BOOKS.

Wallace's Russia. With two elaborate Maps. 8vo, \$4.00.

Baker's Turkey. With two colored Maps. 8vo, \$4.00.

Life of Edwin Forrest. By Rev. Dr. ALGER. Two vols., large 8vo, \$10.00.

Sold only by subscription.

The American. A Novel. By HENRY JAMES, Jr. 12mo, \$3.00.

Prince of Wales in India. By WM. H. RUSSELL. With fifty illustrations. Crown 8vo, cloth, \$3.00.

Scripture Club of Valley Rest; or, Everybody's Neighbors. By author of "Helen's Babies," "Barton Experiment." 16mo, cloth, \$1.00; paper, 50 cents.

The American Senator. By ANTHONY TROLLOPE. 8vo, paper, 50 cents.

Garth. By JULIAN HAWTHORNE. 8vo, paper, \$1.

Marquis of Lossie. By GEORGE MACDONALD. 8vo, paper, 75 cents; cloth, \$1.25.

The Ottoman Power in Europe. By E. A. FREEMAN, D.C.L. 12mo, cloth, \$3.00.

Physical Basis of Mind. By G. HENRY LEWES. 8vo, cloth, \$3.00.

Life of a Scotch Naturalist, Thomas Edward. By S. SMILES. 12mo, cloth, \$1.50.

Lorley and Reinhard. A Novel. By B. AUERBACH. 16mo, cloth, \$1.25.

Any of the above will be sent by mail on receipt of price. Address,

E. R. PELTON, Publisher,

25 Bond Street, New York



SIGNALS OF DANGER.

Disease, like the rattlesnake, usually gives fair warning before it strikes. A failing appetite, a furred tongue, nausea, headache, want of proper action in the bowels, feverishness, lassitude, nervousness, an uneasy feeling in the stomach, etc., are all symptomatic of a coming attack of indigestion, biliousness, colic, fever, or some other positive form of disease. When thus menaced, resort immediately to **Tarrant's Effervescent Seltzer Aperient**, and thus avert the attack. Acting simultaneously upon the digestive organs, the liver, the bowels, and the nerves, this refreshing and agreeable alterative will soon restore the system to its normal condition of health, regularity and vigor. **Sold by all Druggists.**

\$10 = \$25 a day saved made by Agents selling our Chromos, Crayons, Picture & Chromo Cards. 125 samples, worth \$5, sent, post-paid, for 45 Cents. Illustrated Catalogue free. J. H. BUFFORD'S SONS, Boston. Established 1830.

Missouri School of Midwifery.

Anatomy, Physiology, Midwifery, Diseases of Women and Children taught practically at bedside in Maternity Hospital. Write for circulars. Dr. W. C. RICHARDSON, Pres., 3304 North Tenth Street, St. Louis, Mo.

PORTFOLIOS

FOR

Eclectic Engravings,

Holding from 10 to 50 quartos, sent by mail on receipt of 50 cents at this office.

VANITY FAIR.

FOR MEERSCHAUM AND CIGARETTES.

IT DOES NOT BITE THE TONGUE.

Our Cigarettes are as fine as can be produced. Only the best French Cigarette paper is used, which is free from mineral and other injurious substances. L'AMERIQUE—A new Cigarette, of Perique and Vanity Fair, quite equal to a cigar. Unlike all others. Provided with mouth-piece. Highest Award, Vienna, 1873, and Centennial, 1876. Samples, 15 cents. Our Peerless and Plain Fine Cut Chewing are unsurpassed. The only brands receiving the Vienna Award. Always Uniform and Reliable. (5 PRIZE MEDALS.) WM. S. KIMBALL & CO., Rochester, N. Y.

PEERLESS TOBACCO WORKS.

The Christian Union.

EVANGELICAL, UNDENOMINATIONAL, CHRISTIAN.

REV. HENRY WARD BEECHER, *Editor.*
REV. LYMAN ABBOTT,

Sole medium of Ellinwood's authorized verbatim reports each week of Mr. Beecher's

SERMONS IN PLYMOUTH CHURCH.

All his literary productions, including the characteristic "STAR PAPERS," will be given. Comments by Mr. Abbott on the

INTERNATIONAL LESSONS.

SPECIAL CONTRIBUTORS.—Mrs. H. B. Stowe, Rev. Edward Everett Hale, Rev. Howard Crosby, D.D., Rev. Edward Eggleston, D.D., Rev. J. H. Vincent, D.D., Rev. L. W. Bacon, D.D., Rev. S. H. Tyng, Jr., D.D., Charles Dudley Warner, and others.

The CHRISTIAN UNION is a comprehensive Family Religious Newspaper. Terms, \$3 per year, postage prepaid. To Clergymen, \$2.50. To new subscribers on trial for three months, 75 cents. Send Stamp for Sample Copy.

CHRISTIAN UNION EXTRAS.

We issue also a series of articles for special use, republished from the CHRISTIAN UNION, in a convenient and permanent form.

No. 1. OUR CHURCH WORK. A series of papers by the Rev. Stephen H. Tyng, Jr., D.D., on Church Work.

No. 2. HOW TO STUDY THE BIBLE. By the Rev. Lyman Abbott. Giving plain and practical directions to Sunday-School Teachers and other lay students of the Bible.

No. 3. HENRY WARD BEECHER IN THE WEST (with steel plate engraving of Mr. Beecher). Comprising a brief account of his Western Trip, together with "Notes by the Way," in which he has given sketches of the people and places on his route.

Sold by Booksellers. Sent, post-paid, on receipt of 15 cents, or any two numbers for 25 cents. Address,

HORATIO C. KING, Publisher,

27 PARK PLACE, NEW YORK.

BUY THE

Hartford Woven Wire Mattress

MADE BY THE

WOVEN WIRE MATTRESS CO.,

OF

HARTFORD, CT.,



Whose patents have been sustained by the U. S. Court.

Licensed manufacturers for the Western States,

WHITTLESEY & PETERS,

Chicago, Ill.

THE

MUTUAL LIFE

INSURANCE COMPANY

OF NEW YORK.

F.S. WINSTON, PRESIDENT.

ISSUES EVERY APPROVED DESCRIPTION OF

LIFE AND ENDOWMENT POLICIES

ON TERMS AS FAVORABLE AS THOSE OF ANY OTHER COMPANY.

ORGANIZED APRIL 12TH 1842.

CASH ASSETS OVER \$80,000,000.

American or Foreign Books, and all Publications, whether new or old, will be sent by mail or express, prepaid, on receipt of advertised price, by the Publisher of The Eclectic.

ECLECTIC HOTEL DIRECTORY.

IMPERIAL HOTEL,

THE ONLY

FIRST-CLASS THREE-DOLLAR-PER-DAY HOUSE IN WASHINGTON CITY.

To meet the wants of the Travelling Public, this First-class Hotel has reduced its price from Four to Three Dollars per day.

The above Hotel is pleasantly located near Fourteenth Street, fronting on Penn. Avenue, is convenient to the Treasury, Army, Navy, State, Post-Office, and Interior Departments.

JAMES S. PEIRCE, Proprietor.

MORRIS HOUSE,	CAPITOL HOTEL,	NATIONAL HOTEL,
Chester, Pa.	Dover, Del.	Middletown, Del.

MARKOE HOUSE,

PHILADELPHIA, PA.

H. M. BEIDLER, Proprietor.

The "Markoe" is **First-Class** in all its appointments, and has reduced its transient rates to \$2.00 per day. Situated on **Chestnut Street, near Ninth**, the Travelling Public will find it both a convenient and delightful resort.

CLAYTON HOUSE,

WILMINGTON, DEL.

I. C. PYLE, Proprietor.

ST. CLAIR HOTEL,

MONUMENT SQUARE, BALTIMORE, MD.

W. H. CLABAUGH, Proprietor.

The **ST. CLAIR** is conveniently located in the heart of the City, and desirable both to Business Men and Tourists, as Street Cars to all Depots pass near the door.

Prices, \$2.00 and \$2.50 per day, according to location.

MARYLAND HOTEL,
Annapolis, Md.

WM. H. GORMAN & CO., Proprietors.

GUYS' HOTEL,
On European Plan.
Baltimore, Md.

FORD'S HOTEL,

Cor. Eleventh and Broad Sts., Richmond, Va.

A. J. FORD, Owner and Proprietor.

Board, \$2.00 and \$2.50 per day, according to location.

CENTRAL HOTEL,
Charlotte, N. C.

H. C. ECCLES, Proprietor.

McADOO HOUSE,
Greensboro', N. C.

W. D. McADOO, Proprietor.

WHEELER HOUSE,

Columbia, S. C.

OWEN DALY, Proprietor.

POPULAR WORKS OF FICTION

The following Novels are among the most popular works of fiction published, all having passed through a number of editions.

- At Odds. By BARONNE TAUPHREUS, author of "The Initials," etc. 12mo. Cloth. \$1.75.
- Beatrice Boville, and other Stories. By "OUIDA," author of "Puck," etc. 12mo. Cloth. \$1.50.
- Bébé. A Story. By "OUIDA," author of "Strathmore," etc. 12mo. Cloth. \$1.50.
- Beyond the Breakers. By Hon. R. D. OWEN. Illustrated. 8vo. Cloth. \$1.50. Paper. \$1.00.
- Breaking a Butterfly. By the author of "Guy Livingstone." Illustrated. 12mo. Cloth. \$1.25.
- By His Own Might. By the author of "Only a Girl." 12mo. Cloth. \$1.75.
- Cecil Castlemaigne's Gage, and other Stories. By "OUIDA." 12mo. Cloth. \$1.50.
- Chandos. A Novel. By "OUIDA," author of "Idalia," etc. 12mo. Cloth. \$1.50.
- Children of the Abbey. By REGINA MARIA ROCHER. 12mo. Cloth. \$1.00.
- Countess Gisela. After the German of E. Marlitt, by Mrs. A. L. WINTER. 12mo. Cloth. \$1.50.
- Daisy. By the author of "The Wide, Wide World." 12mo. Cloth. \$2.00.
- Dallas Galbraith. A Novel. By Mrs. R. H. DAVIS. 8vo. Cloth. \$1.50. Paper. \$1.00.
- Dollars and Cents. By the author of "Queechy," etc. 12mo. Cloth. \$1.75.
- Dolores. A Novel. By Mrs. FORRESTER, author of "Diana Carew." 12mo. Cloth. \$1.75.
- Dorothy Fox. By LUCIA FARR. Illustrated. 8vo. Cloth. \$1.25. Paper. 75 cents.
- Folle-Parine. A Novel. By "OUIDA," author of "Strathmore," etc. 12mo. Cloth. \$1.50.
- Gil Blas of Santillane. From the French of LA SALLE. 12mo. Cloth. \$1.00.
- Gold Elsie. From the German of E. Marlitt, by Mrs. A. L. WINTER. 12mo. Fine cloth. \$1.50.
- Granville de Vigne. By "OUIDA," author of "Idalia," "Puck," etc. 12mo. Cloth. \$1.50.
- Green Gate (The). After the German of Wichert, by Mrs. WINTER. 12mo. Cloth. \$1.75.
- Hulda. A Romance. From the German. By Mrs. WINTER. 12mo. Cloth. \$1.75.
- Idalia. A Novel. By "OUIDA," author of "Under Two Flags," etc. 12mo. Cloth. \$1.50.
- Leaf in the Storm (A), and other Stories. By "OUIDA." Illustrated. 8vo. Paper. 80 cents.
- Life and Adventures of a Country Merchant. By J. B. JONES. Illustrated. Cloth. \$1.25.
- Little Moorland Princess (The). After the German of E. Marlitt, by Mrs. A. L. WINTER. 12mo. Cloth. \$1.50.
- Magdalena. From the German of E. Marlitt. Illustrated. 8vo. Paper. 35 cents.
- Malcolm. By GEORGE MACDONALD. 8vo. Cloth. \$1.50. Paper. \$1.00.
- Old Man'selle's Secret (The). After the German. By Mrs. A. L. WINTER. 12mo. Cloth. \$1.50.
- Only a Girl. A Romance. After the German. By Mrs. A. L. WINTER. 12mo. Cloth. \$2.00.
- Over Yonder. From the German of E. Marlitt. Illustrated. 8vo. Paper. 30 cents.
- Pascarel. A Romance. By "OUIDA," author of "Idalia," etc. 12mo. Cloth. \$1.50.
- Puck. A Novel. By "OUIDA," author of "Idalia," "Strathmore," etc. 12mo. Cloth. \$2.00.
- Queechy. By the author of "The Wide, Wide World." 12mo. Cloth. \$1.75.
- Quits. A Novel. By BARONNE TAUPHREUS, author of "The Initials." 12mo. Cloth. \$1.75.
- Randolph Gordon, and other Stories. By "OUIDA," author of "Chandos," etc. 12mo. Cloth. \$1.50.
- Strathmore; or, Wrought by his Own Hand. By "OUIDA." 12mo. Cloth. \$1.50.
- Say and Seal. A Novel. By the author of "The Wide, Wide World," etc. 12mo. Cloth. \$2.00.
- Scottish Chiefs. An Historical Romance. By JANE PORTER. 12mo. Cloth. \$1.00.
- Second Wife (The). From the German of E. Marlitt, by Mrs. WINTER. 12mo. Cloth. \$1.75.
- Signa. A Romance. By "OUIDA," author of "Under Two Flags," etc. 12mo. Cloth. \$2.00.
- Thaddeus of Warsaw. An Historical Romance. By JANE PORTER. 12mo. Cloth. \$1.50.
- Thrown Together. By FLORENCE MONTGOMERY. 12mo. Cloth. \$1.50.
- Tricotrin. A Novel. By "OUIDA," author of "Puck," etc. With Portrait. 12mo. Cloth. \$1.50.
- Tristram Shandy. By LAURENCE STERN. 12mo. Cloth. \$1.00.
- Twofold Life (A). A Romance. By the author of "Only a Girl." 12mo. Cloth. \$1.75.
- Under Two Flags. A Novel. By "OUIDA," author of "Puck," etc. 12mo. Cloth. \$1.50.
- War Path (The). By J. B. JONES. Illustrated. 12mo. Cloth. \$1.25.
- Why did He not Die? After the German. By Mrs. A. L. WINTER. 12mo. Cloth. \$1.75.
- Wide, Wide World (The). A Tale. By the author of "Queechy," etc. 12mo. Cloth. \$1.75.
- Wild Western Scenes. By J. B. JONES. Illustrated. 12mo. Cloth. \$1.25.

POPULAR JUVENILE BOOKS.

- Cast Up by the Sea. By Sir SAMUEL W. BAKER. Illustrated. 12mo. Cloth. \$1.25.
- Deep Down. A Tale of the Mines. By R. M. BALLANTYNE. Illustrated. 12mo. Cloth. \$1.25.
- Dick Rodney; or, Adventures of an Eton Boy. By JAMES GRANT. Illustrated. 12mo. Cloth. \$1.25.
- Eastern Fairy Legends. Collected by M. FRANK. Illustrated. 12mo. Cloth. \$1.25.
- Enchanting and Enchanted. Fairy Tales from the German. By Mrs. A. L. WINTER. Illustrated. 12mo. Cloth. \$1.25.
- Erling the Bold. By M. R. BALLANTYNE. Illustrated. 12mo. Cloth. \$1.25.
- Eve's Adventures in Shadowland, and the Merman. Illustrated. 12mo. Cloth. \$1.25.
- Fire Brigade (The). A Tale of London. By R. M. BALLANTYNE. Illustrated. 12mo. Cloth. \$1.25.
- Frank Wildman's Adventures on Land and Water. By GERTYACKER. Illus. 12mo. Cloth. \$1.25.
- Heroic Life; or, Pictures of Heroes. Illustrated. 12mo. Cloth. \$1.25.
- Mark Bonworth. A Tale of the Indian Ocean. By W. H. G. KINGSTON. Illustrated. 12mo. Cloth. \$1.25.
- Midshipman (The). Marmaduke Merry. By W. H. G. KINGSTON. Illustrated. 12mo. Cloth. \$1.25.
- Peter the Whaler. By W. H. G. KINGSTON. Illustrated. 12mo. Cloth. \$1.25.
- Princess (The) and the Goblin. By GEORGE MACDONALD. Illustrated. 12mo. Cloth. \$1.25.
- Privateersman (The), and his Adventures. By CAPTAIN MARRYAT, R.N. Illustrated. 12mo. Cloth. \$1.25.
- Ronald Bannerman's Boyhood. By GEORGE MACDONALD. Illustrated. 12mo. Cloth. \$1.25.
- Red Eric (The); or, the Whaler's Last Cruise. By R. M. BALLANTYNE. Illustrated. 12mo. Cloth. \$1.25.
- Round the World. By W. H. G. KINGSTON. Illustrated. 12mo. Cloth. \$1.25.
- Salt Water; or, the Adventures of Nell d'Arcy. By W. H. G. KINGSTON. Illustrated. 12mo. Cloth. \$1.25.
- Tiger Prince (The); or, Adventures in Abyssinia. By WM. DALTON. Illustrated. 12mo. Cloth. \$1.25.
- Wild Sports in the Far West. By FREDERICK GERTYACKER. Illustrated. 12mo. Cloth. \$1.25.
- Young Islanders (The); or, The School-Boy Cruises. By J. FAYLOR. Illustrated. 12mo. Cloth. \$1.25.

Will be sent by mail, post-paid, upon receipt of the price, by

E. R. PELTON, Publisher,

25 BOND STREET, NEW YORK.

